

To Riverside City Council  
Case # P19-0560 (CUP), P19-0561 (VR), P19-0562 (VR), and P19-0563 (COA)

Why are so many citizens distrustful of government? I offer a local example.

Riverside has laws, regulations and guidelines designed to maintain standards for the city. What most of us don't know is that none of them need apply when it is the city itself that wants to ignore them. That happens often. It is happening NOW.

In 2017, Overland Development Company was chosen to produce a "boutique" hotel on the corner of Lemon and Mission Inn in the heart of two historic districts. Soon they were busy showing plans for a 161 room hotel with 203 underground parking spaces. It was assured that it would blend with the historic styles of this area, be no more than 60 feet tall and would observe the standard setbacks. It would share badly needed parking with the public and follow all the guidelines of this historic district. This plan pleased the small select group who saw it. This group did not include most of the project's immediate neighbors.

The 2021 version of the plan presented to the city has 226 rooms and only 144 parking spaces, it ballooned to 93 feet high, eliminates setbacks and esthetic guidelines and bulks huge in the lot and is a thoroughly typical, flat-roofed modern building that resembles nothing in the area and is justified by its slight similarity to the utilitarian and esthetically forgettable old fire station. None of the small select group and few neighbors saw or approved of this plan.

Developers spent four years cultivating approval of city staff and committees, showering compliments, meeting often with staff and others. Developers dangle an optimistic \$1.3 Million annual city tax and fee benefit. City staff is so gung-ho that they sent the proposal to the Planning Commission before the Cultural Heritage Board ever saw it. Project neighbors were unaware of the vast changes until the day before the planning commission met. It flew through Planning without serious discussion though inconsistent with many regulations observed by everybody else in the area-regulations that were established to preserve the unique character of downtown.

On August 17, City Council will approve this project despite multiple presentations that note federal, state and city standards that require caution and review. The city will press ahead and they will please their big money developer friends. However, I doubt they will please the citizens of Riverside when they see this modern cookie-cutter building amid the unique and beautiful buildings built with love and artistry by our ancestors.

Donald Miller  
Member, Board of Trustees, First Congregational Church of Riverside  
[Millwoodwinery@gmail.com](mailto:Millwoodwinery@gmail.com)  
951 780-1516

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
CEDD Director



Date: 8-17-21

Item No.: 15

# FIRST CONGREGATIONAL CHURCH OF RIVERSIDE

*A Progressive Voice of Christianity in the Inland Empire*

August 12, 2021

City Council, City of Riverside

City Hall - Art Pick Council Chamber

3900 Main Street, Riverside 92522

Re: Comment Letter for Appeal of Case Numbers P19-0560, P19-0561, P19-0562 and P19-0563

Honorable Council Members:

In a continuous line, from our founding as the first church in Riverside in 1872 to the present day, there have been members whose job was to use their Christian ideals to act as caretakers of the faith community called First Congregational Church and its assets in Downtown Riverside. It is with this attitude of service that the current members of the First Congregational Church of Riverside and its duly elected Board of Trustees continue as the current generation of caretakers for our National Landmark church.

While we have had concerns about losing the parking lot at Lemon and Mission Inn and its impact on our members and attendee's ability to attend church services, events, weddings and funerals, we have never been against the city's plans to build a hotel on that lot. However, it was with great concern that we found out at the last minute, and with no contact or notification by the city, that the project had ballooned from a boutique hotel to a two hotel project of 220+ rooms with a city supported variance for significantly reduced parking (144 spaces) and an architectural style that looked to midcentury modern and did not in any way reflect or honor the Spanish Baroque style that makes our church just across Lemon Street such an iconic landmark in Riverside and is so prevalent in the contributing buildings to the Mission Inn Historic District, including that other Riverside treasure, the Mission Inn.

As any good caretakers would, we met with our city council person, we spoke to the developer, and we consulted well respected experts in the fields of CEQA law and historic preservation. As a result of these conversations, as well as very in depth conversations among our members and Board of Trustees, we respectfully make the following requests of our city council leaders:

1. We are in agreement with the developer's proposal to remove six rooms from the 8<sup>th</sup> floor of the building and increase the size of the open patio in that area. We request that the city include that change in the conditions of approval to insure it occurs.
2. We request that the city acknowledge the importance of readily available parking to our church operations, including the impact the sale and demolition of the Orange Street Parking Garages will have on the parking availability in the area immediately surrounding the church, by conditioning this project

to enter into an agreement with the church to allow for Sunday morning parking for church services at a reasonable fee, as has been offered by the developer of this project.

3. We request that the city only approve this project with the condition that the developer work with the church and historic preservation experts to alter its external architectural style to better reflect not only the fire station from which it currently takes all of its architectural cues, but also First Congregational Church, the Mission Inn, and the Municipal Auditorium. Changes we are hoping to see including softening and rounding of the hard edges and angles currently incorporated in the building, less glass, and the use of color, materials, and decorative elements that reflect the materials and design that harken back to the Spanish Baroque style, while not mimicking it. Perhaps as a two hotel project, these changes could help differentiate the two hotel products planned for the site, while at the same time helping this new project better blend and contribute to the Mission Inn Historic District.

First Congregational Church and its Board of Trustees do not feel that the inclusion of these conditions should prevent or delay the approval of this project. We feel that given what must be done to prepare for the construction of this large and complicated project, there will be time for the developer to respond to our requests while keeping the project to its timeline. Please note that these requested conditions would not alter the footprint of the building in any way.

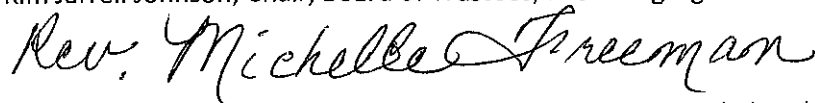
The Board of Trustees commits to making ourselves available to the city and the developer to make sure our requested conditions, should they be approved, happen in a timely fashion.

We hope our city leaders will entertain approval of our requests and we look forward to being good neighbors with the new Marriot Hotels and their guests, who will come to Riverside to enjoy our historic downtown and its beautiful landmark buildings.

Sincerely,



Kim Jarrell Johnson, Chair, Board of Trustees, First Congregational Church



Rev. Michelle Freeman, Senior Minister, First Congregational Church

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director



Chatten-Brown, Carstens & Minter LLP

2200 Pacific Coast Highway, Suite 318  
Hermosa Beach, CA 90254  
www.cbcearthlaw.com

**Hermosa Beach Office**

Phone: (310) 798-2400

Fax: (310) 798-2402

**San Diego Office**

Phone: (858) 999-0070

Phone: (619) 940-4522

**Amy C. Minter**

Email Address:

[acm@cbcearthlaw.com](mailto:acm@cbcearthlaw.com)

Direct Dial:

310-798-2409

July 9, 2021

*Via Email ([GPlascencia@riversideca.gov](mailto:GPlascencia@riversideca.gov); [EEwards@riversideca.gov](mailto:EEwards@riversideca.gov);  
[JPerry@riversideca.gov](mailto:JPerry@riversideca.gov); [city\\_clerk@riversideca.gov](mailto:city_clerk@riversideca.gov))*

Land Use, Sustainability and Resilience Committee  
City of Riverside  
City Hall - Art Pick Council Chamber  
3900 Main Street, Riverside 92522

Re: Support for Cultural Heritage Board Denial of Certificate of  
Appropriateness; Case P19-0563; **Agenda Item 2**

Honorable Committee Members:

On behalf of the First Congregational Church of Riverside, we submit these comments in support of the Cultural Heritage Board's denial of a certificate of appropriateness for the proposed construction of an eight-story hotel project at 3466 Mission Inn Avenue, in the middle of one of the most historic areas of the City of Riverside-the Mission Inn Historic District. While my clients do not object to a hotel project, any applicant for new development at this site must recognize the historic significance of the area in which they have chosen to locate. Development must be of a design, height and massing that respects the surrounding Historic District.

The Mission Inn Historic District is located in downtown Riverside, bounded approximately by 6<sup>th</sup> Street between Main Street and State Route 91 on the north to 11<sup>th</sup> Street between Orange and Main Streets on the south. The period of significance for the District is 1871 to 1946, with an embodiment of the distinctive Mission Revival style, a regional architectural movement that drew from the precedent of the Franciscan Missions. This Historic District includes a number of National Register-listed resources and City Landmarks, including the All Souls Universalist-Unitarian Church, the Federal

Post Office/Riverside Municipal Museum, the First Congregational Church, the First Congregational Church Rectory, the First Church of Christ Scientist, the Riverside Municipal Auditorium and the Old YWCA Building/Riverside Art Museum.

My clients are part of an active congregation at the First Congregational Church, with strong community involvement and a sense of pride in preserving these important historic resources. The First Congregational Church was designed by Myron Hunt, and built in 1913. It has been recognized as the first Spanish Baroque Revival style building in the United States, making it uniquely historic. The Church is two stories with a Latin cross plan with a 113-foot tall Churrigueresque style bell tower. The Church congregation added programmable lighting to this bell tower at significant cost and effort, enhancing nighttime views of the tower from State Route 91 and elsewhere in the City. At the proposed eight story height, the Project would obscure these new nighttime views of the bell tower, as well as daytime views.

The Church and Rectory were added to the National Register of Historic Places in 1997 as a property that embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction. The bell tower was identified in the National Register listing as a character-defining feature, noting that: “For over eighty years the highly visible Churrigueresque style tower has served as an urban ‘anchor,’ signaling the entrance into Riverside's downtown via the Seventh Street/Mission Inn Avenue corridor.” (National Register designation, p. 1.) The National Register also identified the importance of the setbacks for this resource, finding the “church building and its generously landscaped linear forecourt perpetuated the image of Riverside as a Mediterranean city.” (*Ibid.*)

The Project would adversely impact the historic First Congregational Church of Riverside, other surrounding National Register and City Landmark resources and the Mission Inn Historic District as a whole due to its excessive height, massing and lack of setbacks. As proposed, the Project would construct a 226-room, eight story, more than 93-foot-tall dual branded Marriott Hotel, with three levels of underground parking. The Project applicant has requested a variance to eliminate the required 15-foot front yard setback along Mission Inn Avenue and instead proposes a mere one-foot setback. The oversized Project is also significantly under-parked, seeking a variance to provide only 144 parking spaces when 226 are required by the City’s Downtown Specific Plan. The Project is designed in the International style, a much more modern style than the Mission

Revival style of the Mission Inn Historic District, making it not only oversized but also of an incompatible design for a building of that size within the District. The Project also includes adaptive reuse of the former Central Fire Station, a California Register-listed historic resource, converting the resource into office space. The Project requires a certificate of appropriateness due to its location within the Mission Inn Historic District and because it includes alteration to a designated historic resource.

The City has claimed a Class 31 categorical exemption, for restoration of historic resources, and a Class 32 categorical exemption, for specific types of infill development, apply to the Project. This claim is incorrect. As in the expert report from GPA Consulting, the Project fails to meet a number of Secretary of Interior's Standards, making a Class 31 exception unavailable. A Class 32 exemption is also inapplicable because the Project is inconsistent with General Plan policies and standards set forth in the Downtown Specific Plan and could result in adverse traffic and air quality impacts. Even if a categorical exemption to the California Environmental Quality Act (CEQA) were applicable to the Project, the City could not rely upon it because exceptions to the use of categorical exemptions apply due to the Project's adverse historic impacts and cumulative impacts. Further, due to the incompatibility of the Project with the surrounding Historic District, the City cannot make the required findings to support the issuance of a certificate of appropriateness. For all of these reasons, we urge the Committee to reject the developer's appeal and uphold the Cultural Heritage Board's denial of a certificate of appropriateness.

## **I. The Proposed Approvals Would Violate CEQA.**

CEQA requires the City to conduct an adequate environmental review *prior* to making any formal decision regarding projects subject to the Act. (CEQA Guidelines § 15004). By improperly relying on a categorical exemption to environmental review, the City has failed to do so.

### **A. The City Cannot Rely Upon a Class 31 Categorical Exemption.**

The City has proposed to approve the Project without environmental review, claiming a Class 31 categorical exemption applies. A Class 31 exemption is applicable to "projects limited to maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of historical resources in a manner consistent

with the Secretary of the Interior's Standards for the Treatment of Historic Properties.” (CEQA Guidelines § 15331.)

It is the City’s burden to prove that the proposed Project fits within this class of categorical exemption. (*California Farm Bureau Fed'n v. California Wildlife Conservation Bd.*, (2006) 143 Cal. App. 4th 173, 186.) The City has failed to meet this burden. GPA Consulting, a firm specializing in historic preservation and rehabilitation, prepared a July 9, 2021 report analyzing whether this Project would meet the Secretary of Interior’s Standards for Treatment of Historic Properties. GPA Consulting meets the Secretary of Interior’s Professional Qualifications Standards for history, architectural history, architecture, and historic architecture, qualifying them as experts in determining whether a project meets the Standards for Treatment of Historic Properties.

Their expert analysis found the proposed Project would, or could without mitigation, fail to meet several of the Secretary of Interior’s Standards for the construction of the eight-story hotel in the middle of the Mission Inn Historic District. Because the Project would not meet the Secretary of the Interior's Standards for the Treatment of Historic Properties, a Class 31 categorical exemption cannot be used to avoid environmental review for the Project.

#### **B. The City Cannot Rely on a Class 32 Exception.**

The City also attempts to improperly rely upon a Class 32 exemption to CEQA review. To rely on a Class 32 exemption, it is the City’s burden to demonstrate, based on substantial evidence, that the Project is “consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations,” and that approval of the Project “would not result in any significant effects relating to traffic, noise, air quality, or water quality.” (CEQA Guidelines § 15332.) As set forth below, the City has not met this burden because, as proposed, the Project is inconsistent with applicable land use policies and regulations and could result in significant traffic and air quality impacts.

Moreover, the City does not have discretion to interpret the requirements included in CEQA’s Class 32 exemption. The interpretation of the language of the guidelines implementing CEQA or the scope of a particular CEQA exemption presents “a question of law, subject to de novo review” by a court. (*Fairbank v. City of Mill Valley* (1999) 75 Cal.App.4th 1243, 1252; *Azusa Land Reclamation Co. v. Main San Gabriel Basin*

*Watermaster* (1997) 52 Cal.App.4th 1165, 1192.) “[A categorical] exemption can be relied on only if a factual evaluation of the agency's proposed activity reveals that it applies.” (*Muzzy Ranch Co. v. Solano County Airport Land Use Com.* (2007) 41 Cal.4th 372, 386.) “[T]he agency invoking the [categorical] exemption has the burden of demonstrating” that substantial evidence supports its factual finding that the project fell within the exemption. (*Ibid.*)

### **1. The Project is Not Consistent With General Plan Policies and Zoning Regulations.**

In order to rely on a Class 32 exemption, a project must be “consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.” Here, the Project cannot be approved based on a Class 32 exemption because it is not consistent with General Plan and Downtown Specific Plan policies requiring compatibility of new development within historic districts and is also inconsistent with specific land use regulations established by the Downtown Specific Plan for the Mission Inn Historic District.

The City’s General Plan Land Use and Historic Preservation Elements recognize the historic significance of the downtown area of Riverside and the importance of historic preservation to the City’s identity. In support of this recognition, the General Plan includes a number of policies promoting historic preservation and compatible development in historic districts. Unfortunately, as discussed in the GPA Consulting report, as proposed, the Project is incompatible with the surrounding Mission Inn Historic District due to its excessive height, the massing of the development and the out-of-character design of the building. Thus, the Project is inconsistent with the following General Plan policies and objectives:

- Policy HP-1.5: The City shall promote neighborhood/city identity and the role of historic preservation in community enhancement.
- Policy HP-5.1: The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.
- Objective LU-48: Strengthen the identity and character of Downtown using the existing historic and architectural urban character of the community, while



allowing for new structures that are architecturally compatible with and complementary to the existing architectural and historic fabric.

The General Plan promotes the protection of historic districts through the implementation of Neighborhood and Specific Plans within the City that contain regulations specific to the areas they cover. The General Plan specifically noted the importance of the Downtown Specific Plan, stating: “Downtown's unique qualities and numerous opportunities form the focus of the award-winning 2002 Downtown Specific Plan, which lays out a twenty-year vision for Downtown to further evolve into a more richly textured, vibrant and thriving destination. The Downtown Specific Plan is the guiding document for the development and growth of Downtown over the next twenty years.” (General Plan, Land Use Element, p. LU-74.) To ensure compliance with the Downtown Specific Plan and other specific plans within the City, the General Plan includes a policy requiring the City to: “Interpret, apply or impose the development restrictions, conditions and/or standards of an approved Specific Plan in addition to those found in this General Plan. (General Plan Policy LU-30.9.) Thus, to be consistent with the General Plan, a project must comply with all standards set forth in the Downtown Specific Plan.

Unfortunately, the proposed Project is inconsistent with several Downtown Specific Plan standards, making it inapplicable for a Class 32 exemption. The Project site is located within the Mission Inn Historic District section of the Downtown Specific Plan, which contains standards specific to this district intended to protect “Riverside’s most important historic buildings.” (Downtown Specific Plan p. 6-10.) The Downtown Specific Plan sets a minimum front yard setback for the Project site of 15 feet. This setback maintains sightlines along Mission Inn Avenue and preserves the setback pattern of the historic district. As acknowledged by the Planning Commission Staff Report, the Project is inconsistent with this Downtown Specific Plan standard. (Staff Report p. 6.) Instead, the Project seeks a variance to allow it to reduce the front yard setback to only one foot. Even with a variance, the Project remains inconsistent with the setback standard established by the Specific Plan, making a Class 32 exemption unavailable to the Project.

The Project is also inconsistent with the parking standards set forth in the Downtown Specific Plan. These standards require 226 parking spaces for a hotel project at this location, but the Project includes substantially few spaces-only 144. The Planning Commission Staff Report acknowledges this Specific Plan inconsistency as well. The

Downtown Specific Plan also restricts the height of new development in the Mission Inn Historic District to 60 feet unless a project can show that it specifically supports the purpose and intent of the District and is compatible with surrounding development and design. As set forth in the GPA Consulting report, the Project is not compatible with surrounding development and design within the Mission Inn Historic District and fails to support the intent of this district to protect not only individual historic buildings, but the setting and character of the historic district as a whole. This increased height is incompatible with surrounding historic resources and would block existing view corridors of the bell tower on the First Congregational Church of Riverside, a character-defining feature of this historic resource. The excessive height of the Project would overshadow this iconic component of the downtown skyline. For these reasons, the increase in height above 60 feet proposed for the Project is further inconsistent with Downtown Specific Plan standards.

The Project is also inconsistent with the following Downtown Specific Plan policies intended to protect the City's historic downtown area due to its incompatible height, massing and design.

- Policy LU 1.1: Maintain the integrity of, and interrelationship between, each Downtown district as follows: ...Raincross District: The pedestrian-oriented center of Downtown, with an emphasis on an intense mixture of residential, specialty commercial, tourist, restaurant, cultural, arts, and civic uses. Design philosophy emphasizes new and infill construction that is compatible with the historic structures that give Downtown its unique identity.
  - *The Project site is located within a subarea of the Raincross District.*
- Policy HP-1-4: Through design review, encourage new development to be compatible with adjacent historical structures in scale, massing, building materials, and general architectural treatment.

Reliance on a Class 32 categorical exemption is not allowed because the Project is not consistent with all General Plan policies, including those requiring compliance with the Downtown Specific Plan standards.

## **2. The Project May Result in Traffic and Air Quality Impacts.**

To rely on a Class 32 categorical exemption to CEQA review, the City must be able to demonstrate, with substantial evidence, that “Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.” (CEQA Guidelines § 15332.) The City has also failed to meet this burden. The Project may result in adverse traffic and air quality impacts that prevent reliance on a Class 32 exemption.

There is already significant traffic congestion on and around Mission Inn Avenue, particularly during the Mission Inn's Festival of Lights, held November through January, and during the many occasions throughout the year when the City closes Mission Inn Avenue for street festivals. When there are existing adverse impacts, even a small addition to the ongoing problem is an adverse impact requiring environmental review and mitigation. (*Los Angeles Unified School Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1025; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 718.) The City has failed to analyze the traffic impacts of the Project on Mission Inn Avenue and surrounding one-way streets, including Lemon Street. Thus, the City lacks substantial evidence to support a claim that the Project does not have significant traffic effects.

The significant under-parking of the Project would also exacerbate existing traffic impacts. Vehicles that are unable to park in the limited parking provided by the hotel will be forced to drive around the area looking for parking, creating traffic impacts and traffic hazards for pedestrians and bicyclists. Lack of adequate parking in this area of the City has been problematic and will be made worse by the sale of two existing City parking structures on Orange Street, which will be torn down and replaced with uses that also require parking.

Additionally, Supporters Alliance for Environmental Responsibility provided an expert report by indoor air quality specialist Francis “Bud” Offermann, P.E. that concluded the Project would have significant adverse health impacts due to indoor air contaminants, produced in part by the use of composite wood building materials that create a cancer risk from formaldehyde off-gassing. (See April 20, 2021 SAFER letter.) Due to the Project’s traffic and air quality impacts, the City cannot rely on a Class 32 categorical exemption.

### **C. Exceptions to Categorical Exemption Require Environmental Review.**

Categorical exemptions from CEQA are subject to exceptions. Even if a project fits within a specified class of categorical exemption, the exemption is inapplicable if any of the exceptions to categorical exemptions apply. (CEQA Guidelines § 15300.2.) If an exception to a categorical exemption applies, CEQA review in the form of an MND or EIR must be conducted.

#### **1. The Project May Adversely Impact Historic Resources.**

“A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.” (CEQA Guidelines § 15300.2(f); *Committee to Save the Hollywoodland Specific Plan v. City of Los Angeles* (2008) 161 Cal.App.4th 1168 [project to install wooden fence on top of historic granite walls could not rely on a categorical exemption due to potential impacts to a historic resource].) Under this exception, a categorical exemption cannot be relied upon if there is a fair argument supported by substantial evidence that the project may have a significant adverse impact on an historic resource. These impacts include not only direct impacts to buildings within the Mission Inn Historic District, but also visual impacts to the setting and character of the District. (*Protect Niles v. City of Fremont* (2018) 25 Cal.App.5th 1129; *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358.) The Project’s adverse impacts to historic resources require analysis in an environmental review document.

GPA Consulting has provided a report detailing the adverse impacts of this Project as proposed on the Mission Inn Historic District. These expert comments provide substantial evidence to support a fair argument that the proposed Project may have adverse impacts on the many historic resources surrounding the Project site. To the extent the report from GPA Consulting reaches different conclusion than the historic resource evaluation prepared in support of the Project, CEQA provides that “if there is disagreement among expert opinion supported by facts over the significance of an effect on the environment, the Lead Agency shall treat the effect as significant and shall prepare an EIR.” (CEQA Guidelines § 15064, subd. (g); *City of Carmel-by-the-Sea v. Board of Supervisors* (1986) 183 Cal.App.3d 229, 247-249 [; *Friend of Old Trees v. Department of Forestry and Fire Protection* (1997) 52 Cal.App.4th 1383, 1398-1403.) Moreover, the

evaluation prepared in support of the Project did not address the significant issues of scale, massing, setbacks and design within the Mission Inn Historic District.

In addition to the expert report submitted by GPA Consulting, many members of the public have submitted comments detailing the adverse impacts this Project would have on the surrounding historic district. Of particular note are the impacts this Project would have on the visibility of the iconic bell tower of the First Congregational Church. The First Congregational Church of Riverside has recently spent hundreds of thousands of dollars to refurbish the design elements of the bell tower and my clients are proud that the tower represents the church as a “Beacon of Hope.” The nearly 94-foot-tall dual hotel project would eliminate and obscure views of the bell tower from important vantage points, including from State Route 91 and from the sidewalk east on the Project site along Mission Inn Avenue. The Project would diminish the prominence of the bell tower as part of downtown’s skyline, adversely impacting this historic resource and the historic district. These impacts, in addition to the many comments submitted regarding the Project’s adverse impacts on the visual character of the Mission Inn Historic District also provide a fair argument supported by substantial evidence that the Project may have significant impacts on historic resources. Further, the City has failed to prepare a line-of-sight study to address the historic impacts resulting from the obscuring of views of the Church’s iconic bell tower. Thus, the City cannot rely on any categorical exemption for this Project.

## **2. The Project Would Result in Cumulatively Considerable Impacts.**

A categorical exemption is “inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.” (CEQA Guidelines § 15300.2(b).) The City has allowed two other seven story projects in the historic district in recent years that demonstrate the cumulative visual impacts in this historic corridor such tall buildings with out-of-character design have on the Mission Inn Historic District. The commercial Stalder Plaza at the northeast corner of Mission Inn Avenue and Market Street and the residential Imperial Hardware Lofts at the northeast corner of University Avenue and the Main Street mall retained only the facades of the original structures, diminishing the historic character of this District. As proposed, the Project’s excessive height at nearly 94 feet, and incompatible design style would further diminish the visual character and historic significance of the Mission Inn Historic District, resulting in cumulative impacts that prevent reliance on a categorical exemption. Frank Miller, who built the Mission Inn and influenced much of downtown’s historic

architecture, envisioned and promoted Mission Inn Avenue as a visual corridor of architecturally compatible buildings. The present style of the Marriott project is wholly at odds with preserving the Mission Inn District's unique character as imagined by Miller.

## **II. The City Cannot Make the Findings Required to Issue a Certificate of Appropriateness.**

To approve a certificate of appropriateness for the Project, the City must be able to make a number of specific findings regarding the Project's compatibility and design. Those findings must be supported by substantial evidence and the findings must "bridge the analytic gap between the raw evidence and ultimate decision." (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 514-15, 517.)

The City must be able to find that: the project is compatible with existing adjacent or nearby Cultural Resources and their character-defining elements; the details, height, scale, massing and methods of construction proposed are consistent with the period and/or compatible with adjacent Cultural Resources; the project does not adversely affect the context including relationship of the project to its surroundings; and the project is consistent with the principles of the Secretary of the Interior's Standards for the Treatment of Historic Properties. (Riverside Municipal Code §20.25.050.) As discussed above and in the attached GPA Consulting report, as proposed, the Project is incompatible with the surrounding Mission Inn Historic District, adversely impacts views of the character-defining First Congregational Church bell tower and is inconsistent with the Secretary of Interior's Standards. Thus, the required findings cannot be made to issue a certificate of appropriateness and the Cultural Heritage Board's denial should be upheld.

## **Conclusion**

For all of the reasons set forth herein, and in additional comments that have been and will be submitted and presented at the Land Use, Sustainability and Resilience Committee hearing, we urge the Committee to recommend the denial of the appeal and require environmental review for this Project if it is not redesigned to address the impacts and incompatibilities addressed in this letter.

Land Use, Sustainability and Resilience Committee  
July 9, 2021  
Page 12 of 12

Thank you for your time and consideration in this matter.

Sincerely,



Amy Minter



July 8, 2021

## Memorandum

**To:**

Amy C. Minter  
Chatten-Brown, Crstens & Minter LLP  
2200 Pacific Coast Highway, Suite 318  
Hermosa Beach, CA 90254  
Via e-mail: acm@cbcearthlaw.com

**RE:**

Proposed Hotel located at 3420-3482 Mission Inn Avenue  
Parcel numbers 213-281-006; 213-281-007; 213-281-008  
Certificate of Appropriateness Case P19-0563

**Project Understanding:**

It is our understanding that Overland Development Company, on behalf of Greens Ehrenberg, LLC has applied for a Certificate of Appropriateness to construct a hotel and adaptively reuse a former fire station within the Mission Inn and Seventh Street Historic Districts in Riverside. The project site is located at 3420-3482 Mission Inn Avenue (Parcel numbers 213-281-006; 213-281-007; 213-281-008) on the south side of Mission Inn Avenue between Lemon and Lime Streets in Ward 1 of the downtown area. The site includes 0.94 acres that is developed with the former Central Fire Station and a surface parking lot. The former Central Fire Station was determined to not contribute to either historic district because it was constructed outside the districts' period of significance, however it was listed in the California Register of Historical Resources as an individual historical resource. Therefore there are three Cultural Resources that could be impacted by the proposed infill development project; the Mission Inn Historic District, the Seventh Street Historic District, and the former Central Fire Station.

According to the City's Municipal Code Chapter 20.25 Section 20.25.010, a Certificate of Appropriateness is required before any person restores, rehabilitates, alters, develops, constructs, demolishes, removes, or changes the appearance of any designated Cultural Resource, eligible Cultural Resource, or any element in a geographic Historic District (contributing and non-contributing), or a contributing feature or contributor to a Neighborhood Conservation Area.



The applicant is requesting approval of a Certificate of Appropriateness for a plot plan and building elevations for the construction of an eight-story, approximately 215,350 square foot hotel and the adaptive reuse of the former Central Fire Station. To support the Certificate of Appropriateness application, the project applicant hired George Taylor Loudon, AIA to prepare a Historic Resource Evaluation Assessment Report, dated January 13, 2021. His analysis concluded that the infill project was consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and the Downtown Specific Plan. His report also included brief information regarding the proposed project's compatibility with the two historic districts.

The Community & Economic Development Department recommended that the project is exempt from the California Environmental Quality Act review pursuant to Section 15331 (Historic Resource Restoration/ Rehabilitation) and 15332 (In-Fill Development Projects), because the applicant proposed that the in-fill and rehabilitation project is consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. Typically, a project that complies with the *Secretary of the Interior's Standards for Rehabilitation* would be considered to minimize impacts on a historical resource to a level of less than significant and could therefore be exempt from CEQA under a Class 31 exemption for historic rehabilitation.

The purpose of this review is to determine whether the proposed project indeed does meet the *Secretary of the Interior's Standards for Rehabilitation* (Standards) as it applies to the infill development within the two historic districts. At the request of the appellant, we have reviewed the staff reports and prior impacts analysis report for the proposed project and have applied the Secretary of the Interior's Standards as it applies to the historic districts to determine if the project could be exempt from the California Environmental Quality Act (CEQA) review.

### **Project Description:**



*Illustration 1: Visual Simulations of proposed infill development project from the Cultural Heritage Board presentation dated April 21, 2021.*

The eight-story dual-branded hotel would include 226 rooms, three levels of underground parking, dual hotel lobbies, a lounge, offices and other back of house services. The floor plan would have a one-foot set-back at the property lines. Materials on the ground floor would include brick veneer to match the adjacent fire station and glass storefront systems. Public art is proposed along Mission Inn Avenue and within the alley way.

The second floor would include a roof deck with a pool surrounded by rooms in a U-shaped configuration. The northwest corner of the U-shaped building would be set back from the northern property line by approximately 27 feet, creating a covered outdoor patio under the third floor. An approximately 27-foot segment of the pool deck would project over the northern property line by approximately five feet and the pool deck would be secured with a glass railing on the north and west elevations.

Floors three through eight would continue the U-shaped plan and would include hotel rooms and amenities. All elevations of floors three through eight would have articulated masses; the eighth floor would have a roof top patio at the northwest corner of the structure. A variety of materials would be used including stucco, metal wall systems, metal louvers, and exposed smooth concrete.

The former Central Fire Station would be adaptively reused into office space. The rehabilitation of this building would include replacing seven existing vehicular doors on the front and rear elevation with a new storefront system. The vehicular doors would be repurposed as part of a public art installation in the alley along the proposed hotel. The louvered awnings on the west elevation would be removed and five windows on the west elevation would be removed and filled in to match the surrounding brick or stucco materials. Two windows on the set elevation would be converted to openings for access to a dual-sided elevator in the proposed adjacent hotel that would provide access to

parking. The project also proposes to install roof top art identifying the Riverside Arts District along the east elevation.

The proposed size, massing and scale is much larger than adjacent buildings and the proposed new architectural features and materials are borrowed from the adjacent fire station. Fire Station Number 1 is an early example of a mid-century modern, "International Style" design building with a generally intact façade and composition. Architects Moise, Harbach and Hewlett were also the architects of the 1965 Riverside Public Library one block west. Both buildings are non-contributing to either historic district because they were constructed after the districts' period of significance. So the proposed design features utilize a blocky modern aesthetic and a mix of materials including brick, glass, and concrete. The design emphasizes vertical elements with articulated bays in white and blue.

### **Prior Impacts Analysis:**

To support the Certificate of Appropriateness application, the project applicant hired George Taylor Loudon, AIA to prepare a Historic Resource Evaluation Assessment Report, dated January 13, 2021. His analysis concluded that the infill project was consistent with the Secretary of the Interior's Standards and the Downtown Specific Plan. His report also included information regarding the proposed project's compatibility with the Seventh Street and Mission Inn Historic Districts.

The Staff Report for the April 21, 2021, Cultural Heritage Board Meeting stated that the application proposed is compatible with the existing adjacent or nearby Cultural Resources and their character-defining elements. The analysis referenced similar design features and materials to the adjacent historic fire station building and stated that the building was non-contributing to the Seventh Street Historic District and the Mission Inn Historic District, but that the fire station and Riverside Public Library are examples of mid-century modern buildings that "work harmoniously within the districts."

However, although Loudon's assessment of impacts addressed the rehabilitation element of the former fire station against the Secretary of the interior's Standards for Rehabilitation, it did not adequately address what the character-defining-features of the two historic districts were and whether the new infill development was compatible with the surrounding setting of those two historic districts.

On page 18, the report does reference design standards and guidelines for the Raincross District (and sub-area Mission Inn Historic District) and underlines the point that new construction should be in scale and architecturally harmonious with nearby historic buildings and that the listed signature buildings [Fox Theater, Stalder Building, Mission Inn, Municipal Museum, Unitarian Church, Congregational Church, Municipal Auditorium, Post Office, Loring Building, and Art Museum] should be used for inspiration regarding design, form, detailing, and site layout. The report states that states that the proposed new development is compatible with the adjacent historic structures and historic district character, but it doesn't specify HOW. It merely addresses the height of

the proposed building to adjacent 3 and 4 story buildings (except for the Mission Inn at 5-6 stories). But the report fails to describe the character of the historic districts or the massing, architectural design, and materials of adjacent buildings that CONTRIBUTE to the significance of the historic districts.

Although the project might be compatible with the materials and design features of the former mid-century modern fire station, the proposed project is not compatible with the size, scale, or massing of that building. Further the proposed new hotel infill project is not compatible with the size, scale, massing, architectural design features, character, or materials of adjacent CONTRIBUTING Cultural Resources of the two historic districts. Design elements of new buildings that are encouraged within the historic districts include contemporary expressions of towers and domes and particular attention should be made to the scale, proportion, and architectural compatibility with the rest of the building. The Design Guidelines for infill construction in commercial historic districts (Section 15.8.2) states that "Building Mass, Scale and Form Historic commercial areas in the Downtown Specific Plan area were generally composed of two- to three-story flat roof structures composed as rectangular solids. New structures should maintain the average scale of historic structures within the area."

The following section describes the significance of the two historic districts and the character-defining-features of each.

### **Description of Surrounding Historic Districts:**

#### Mission Inn Historic District:

The Mission Inn Historic District is a commercial district located in the old downtown core of Riverside that is roughly bounded by Sixth Street, Eleventh Street, Market Street and the Riverside 91 Freeway). This commercial district is the old downtown core and is comprised primarily of commercial and government buildings. It's period of significance is 1871-1946. It encompasses part of the Seventh Street Historic District and is distinctive for its embodiment of the Mission Revival style. Other styles include Spanish Colonial Revival and Art Deco with a variety of building materials such as ceramic brick, terra cotta and rough-hewn granite. Well-known architects of the district include Arthur Benton, Julia Morgan, G. Stanley Wilson, and Myron Hunt. Major focal points include the Mission Inn, the Riverside County Courthouse, the First Congregational Church, and the Fox Theater. The district features numerous resources listed in the National Register of Historic Places.<sup>1</sup>

#### Seventh Street Historic District:

The Seventh Street Historic District includes a grouping of some of Riverside's finest commercial and residential architecture, as well as the historic citrus tree pergolas, Raincross streetlights, and the Buena Vista Bridge. Also known as City Landmark No. 40, it was named before Seventh Street was changed to Mission Inn Avenue and prior to the designation of the Mission Inn Historic District, which encompasses the eastern

---

<sup>1</sup> v <http://www.riversideca.gov/historic/pdf/hpDistrictBrochureText.pdf> ([riversideca.gov](http://www.riversideca.gov)), accessed 7/8/2021.

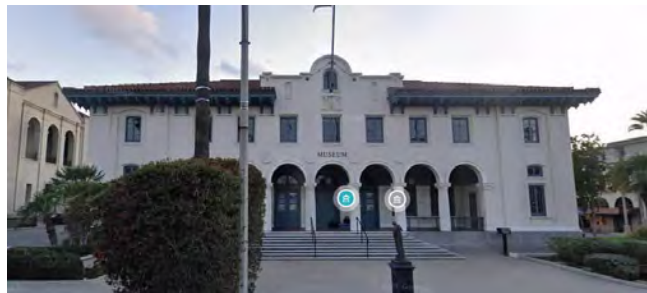


portion of the district. It is roughly bounded by Mission Inn Avenue from Rubidoux Drive to Vine Street and its period of significance is 1889-1945.<sup>2</sup>

#### Character-Defining Features of the Historic Districts:

Because the two historic districts are intertwined, I will address the character-defining-features of both in this analysis. Some of the architectural styles present within the historic district include the Mission Revival (1890-1920), the Beaux Arts (ca. 1885-1930), and the Spanish Colonial Revival (ca. 1920-1930s) styles. Most of the properties are commercial or institutional in use and are 2-4 stories in height (except for the Mission Inn, which is 5-6 stories in height).

The characteristics of the Mission Revival style include low-pitched red-tile roofs, stucco walls, curvilinear dormer and parapets, quatrefoil windows, and details in wood, iron, and tile. The Mission Inn is an example of this style within the historic districts. Common features of the Beaux Arts style include masonry walls, symmetrical facades, coupled columns, monumental stairs, figure sculpture, heavy stone basements, and decorative swags. The Riverside County Courthouse is an excellent example of this style. The characteristics of a Spanish Colonial Revival building include stuccoed exteriors, low-pitched tile roofs, arched window and door openings, and front or side porches. Balconies railings and window grilles are also common.<sup>3</sup> Following are a few examples of contributing buildings located within the immediate vicinity of the proposed project.



<sup>2</sup> v <http://www.riversideca.gov/historic/pdf/hpDistrictBrochureText.pdf> ([riversideca.gov](http://www.riversideca.gov)), accessed 7/8/2021.

<sup>3</sup> v <http://www.riversideca.gov/historic/pdf/hpDistrictBrochureText.pdf> ([riversideca.gov](http://www.riversideca.gov)), accessed 7/8/2021.



*Illustration 2: Examples of adjacent contributing buildings to the Seventh Street Historic District and the Mission Inn Historic District showing 1-3 story massing, and characteristic design features and materials.*

Overall, the setting of the historic district immediately surrounding the proposed project site include large institutional buildings that are set back from the sidewalk. They are 1-3 stories in height, and have asymmetrical massing with arches, towers, and gabled, hipped or parapet rooflines covered in Spanish clay tile. The buildings have a heavy massing and are constructed out of concrete, stucco and cast stone. Many of them have towers, elevated entrances, banding, and ornate detailing around the roofline or towers.

Many of the buildings have arches or arched openings and the color scheme of most of the immediate buildings are unpainted concrete, tan or beige stucco, and red cast stone. The texture of the buildings is organic; some buildings have board formed concrete, others have troweled surface; the Romanesque style church on the opposite corner has a highly textured cast stone exterior. The fenestration pattern of the buildings vary but generally consist of more solid to void; there are no immediate buildings with large expanses of glass or smooth surfaces in the immediate vicinity. Most of the contributing buildings have moderate setbacks and mature landscaping around the base of the building. The street is adorned with street trees (mostly palms) and ornamental streetlights.

### **Analysis of the Secretary of the Interior's Standards for Rehabilitation:**

There are ten Standards for Rehabilitation (See Appendix A). Loudon's report states that the project complies with the Standards. However, GPA does not agree with this finding as it applies to the two adjacent historic districts. Of the ten Standards, Standards # 9 & 10 apply to new construction. A project may be considered to meet Standard #9 if the new work is differentiated from the old and.... is compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment. For this analysis, the historic properties that are being analyzed is the Mission Inn Historic District and the Seventh Street Historic District, within which the subject project is located.

Based on review of the proposed project drawings and visual simulations, it does not appear that the proposed new infill building would be compatible with the character defining features of the contributing buildings within the Seventh Street Historic District or the Mission Inn Historic District. The proposed hotel building would be 8 stories as

opposed to the adjacent 1-3 story buildings, so it would tower above the immediate blocks surrounding the building. The massing is also inconsistent with the surrounding historic buildings in that the proposed building has very little set back and the bays of the building are regular and symmetrical as opposed to the asymmetrical massing of the contributing buildings. The proposed building has a vertical emphasis in its configuration of bays and windows, which is not represented elsewhere within the district.

The architectural design of the building is not compatible with the overall character defining features of the district in that the proposed building derives its architectural elements from the (non-contributing) mid-century modern fire station building as opposed to the other contributing buildings surrounding the project site that are designed in the Mission Revival, Beaux Arts and Spanish Colonial Revival styles. Although the proposed hotel is compatible with the character and architectural design features and materials of the fire station, it is not necessarily compatible with the size, massing, and scale of the two-story fire building.

The materials of the proposed new hotel building are not compatible with the characteristic materials of the historic districts either. The proposed materials include regular rows of red brick on the street level along with a combination of smooth materials such as glass, metal, and smooth stucco. The bays are proposed in multiple colors including grey and blue, which is not represented elsewhere within the historic district.

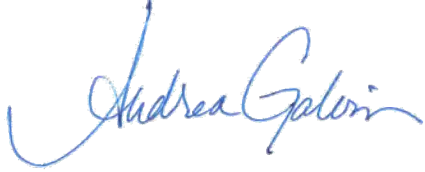
## **Conclusion:**

The feeling of the proposed new infill hotel is not consistent with the overall feeling of the historic district or its association as the oldest commercial area of town. The new building, although distinguishable from the contributing buildings within the historic district, is not compatible with the characteristics and features therein that define and convey the district's historic significance. Therefore, the proposed project is not consistent with Standard #9. Therefore, the project would not comply with the *Secretary of the Interior's Standards for Rehabilitation* as it pertains to infill development within a historic district. As such, the project would not be eligible for a Class 31 exemption under CEQA because the project, as presently designed, does not comply with the *Secretary of the Interior's Standards for Rehabilitation*.

With careful consideration of design elements within the surrounding historic district, the project could comply in the future. Recommended measures for compliance would be to reducing the size and massing of the project, setting back the building from the property line, utilizing some of the design features and materials of the adjacent contributing buildings within the historic district in a modern or distinguishable way, and utilizing similar textures and colors as the contributing buildings within the historic district.

I want to thank you for your consideration of my comments on this proposed project. Please feel free to contact me with any questions that you may have at (310) 792-2690 or by e-mail at [andrea@gpaconsulting-us.com](mailto:andrea@gpaconsulting-us.com).

Sincerely,



Andrea Galvin  
President  
GPA Consulting

Attachments:

- A: Secretary of the Interior's Standards for Rehabilitation
- B: A. Galvin Resume



DONESIA GAUSE

City Clerk

Riverside CA

[swatson@riversideca.gov](mailto:swatson@riversideca.gov)

[city\\_clerk@riversideca.gov](mailto:city_clerk@riversideca.gov)

[www.riversideca.gov/meeting](http://www.riversideca.gov/meeting)

Date: 8-17-21

Item No.: 15

Re: CASE NUMBERS: P19-0560 (CUP), P19-0561 (VR),

P19-0562 (VR), and P19-0563 (COA)

Large building on Mission Inn Avenue

To The Members of the City Council,

I am writing in vehement opposition of the proposed overside hotel in this matter. I am astounded the Planners allowed it to get this far. I have read every bit of what is available online. I watched as much of the online meetings as I could given that we had zero notice. My concerns:

1. **Utter lack of notice.** I realize you changed the rules in the midst of a pandemic and decided not to alert next door neighbors of proposed extreme changes in zoning with no EIR whatsoever. I do not care about the rules in this matter- I care that you and the developers and the planners knew that they were proposing a huge project that would absolutely disrupt and permanently alter and damage a historic church that has been part of the fabric of this city with not even a phone call. We found out about it on social media- by accident.
  - a. I have been on City program groups. We were charged, each and every time, to notify "community partners." How much more of a community partner can there be than the ***next door neighbor you are about to remove all parking, all sunlight, safety, the ability to hold events for two solid years from, and that will threaten the safety of our building? Was it that hard to make a phone call?***
2. **In one meeting the person proposing this said he did not "know how to reach the church, or how it was organized, or that it had Boards."** Not an exact quote- but that was the nature of what was said. First Congregational Church has been a part of this city since the city began. John W. North and Frank Miller were founding members. We have a sign out front, even in Covid, with our phone number and email

and website. Our website has the entire organizational structure of the church on it. Every Wednesday members are there feeding the homeless- even in Covid. You can Google and find the information. You can call the former Mayor, Ron Loveridge, who is a member. The City has his number. Literally. We have two Facebook pages with Messenger attached. We answer. Our email addresses are on the website as well. If this project is being proposed by someone who cannot use Google, or walk across the street to read a sign, then we have bigger issues than I thought. I really believe there was absolutely no desire to reach us- you planned to slip it past with no notice at all.

- a. Which members reading this would like to have a neighbor next door get a permit to add a four story building next to their home and to take all the parking on the street- with no notice and no EIR? That's what you are asking to happen all over the city now. That's ridiculous and all of you listening to this hearing know it.
  - b. We had a meeting with the City years ago when a hotel was proposed. Amazingly enough our then-Councilman, who cared about the historic downtown, and the people who made it what it is through all the years of complete neglect when the Mission Inn was closed, reached out, set up a church meeting, and brought in people to answer questions. He simply called our church office. Imagine that! We were told that the building would: ***be four stories; leave the church visible; leave sunlight coming in; have guaranteed parking for our members in recognition of the historic nature of our contract with the city and support of such things as parking for museum staff; not disrupt weddings and events on weekends and evenings; not take street parking.***
  - c. What happened to the above? Why didn't Erin Edwards come talk to us? Our church is her constituent, as is every member of that church that kept that part of downtown visible and alive when the Mission Inn was a train wreck and we had nothing downtown. Our phone number is even in the Mission Inn hotel information. Our building is featured on the walls of City Hall and Kaiser Hospital. You have us on the City website. We are good for using us for optics but not respect and preservation? Hypocritical and self-serving much?
3. I called Erin Edwards about this. I am still waiting for a return call. That was at least four months ago. I have to say I am shocked. She normally returns calls. I am not her constituent but my church is. And it is an anchor downtown. We are part of Dickens and the Festival of Lights, We host school concerts because of our amazing acoustics and organ. We helped fight the Klan in the City and hosted organizations fighting to make our city safe for the LGBTQ community. We are the church of the Harada Family and our city's founders. Our church deserves the respect of notice of this project, and a response from our elected officials. Thus far none of that has occurred. Not under this Council and this Mayor nor under the last one. We were unaware all of those elected officials and paid staff were planning to cause such

destruction without so much as a conversation. That is a huge disappointment- in every single one of you.

4. **Our church has a right to sunlight.** There is precedent in maintaining natural light access for existing buildings in this country and in Europe. Lawsuits have been filed and won over sunlight. Lawsuits will be filed again in this case. Adding to that is the fact that our more than 100 year old tree will die with this oversized idea.
5. **The pictures featured in the proposal are taken with a wide angle lens to make the proximity look different. This hotel is literally on top of our church. Make them realistic in the presentation. Use metrics to show just how close and how tall all the way around. That will tell you what this is really going to be. It's easy to say that the steeple will be above it. It is another to see a real 3D model with real life proximity and equally realistic models of the digging that will be needed- and where.**
6. **The street parking is an absolute necessity for the church, the arts building, and those who use the downtown.** Selling the parking lots was one of the stupidest ideas you could have come up with. This hotel destroys all of it. Look at the pics. Lemon and Mission Inn. No parking.
7. **The construction will destroy income for us and the arts building.** We use weddings and events to make our budget. We cannot do that with a construction site in full swing until 7pm 6 days a week. And we will have no parking on Sundays. I did not see any remuneration from the City or developer to make up for lost revenue from pre-Covid era activity. In fact, there was none at all. Perhaps you are still trying to chase the church out of downtown and to knock it down again, as was suggested years ago? You are trying to build an everyday hotel/motel residence inn style place in the middle of a historic block. Are you wanting to do enough damage that more area would be opened up for more bland and boring development?
8. **The church is a landmark for finding the downtown skyline.** It will be invisible. Oh, I know, I saw the cutouts, and the "but you can see the tip of the steeple" idea- but let's be real. It will be overwhelmed and visible on only some angles. The developer thought a special platform to point out historic areas would make up for that? Where, exactly, is anyone going to park to go up to said platform? How long will it be before the hotel decides there is too much foot traffic and closes it? Where is the deed to the City? The guarantee of access? The Mission Inn rotunda and historic and iconic sites used to be accessible. Now we pay to see them.
9. **The lack of an EIR is problematic and should be illegal.** I will personally see to it that we find an attorney to represent a suit for that. Hiding behind the old fire station as a historic building is nonsense. That was to avoid loosening the well-known gas spills under that building from the old gas station across the street, and the line that runs between the two parcels. The leaking gas is why the parcel across the street is still vacant. It is too *expensive* to do the required fix for leaking fuel. All of you know it- and if you do not look it up. I guarantee the developer did. If the old station is such a treasure to be preserved, then why, pray tell, is the *new* fire station

in mission style architecture? Oh that's right- because you wanted it to meet the city's historic feel. But now you feel it necessary to roll all over that with a bunch of boxes of stucco reaching all the way to the street? Seriously? It is being preserved as a pitch to avoid the EIR. The Planners refer to that very fact in their review. It's a dodge for the EIR. You know it needs one. Anyone with any sense can see it just looking at the major changes proposed and the impact it will most assuredly have on the surrounding area. The AQMD should be included as well given how many more hours of gas fumes will be spewed by motorists looking for non-existent parking. There isn't even parking for staff of the hotel. That will mean they have to go hunt or they will need drop off service- and that is double the number of car trips. That was absolutely nowhere in the inadequate planning report. They simply said they gave up- no parking it shall be.

10. **The three stories of underground parking- now how does that work with masonry 100 plus year old buildings behind and across the street? Where is the seismic study?** Do none of you remember the entire downtown shaking when Cal Trans was redesigning the freeway? 911 had dozens of calls. Three stories of parking underground equals digging to five stories for footings. The church building has tunnels underneath it. It is attached to the Mission Inn. Perhaps you and the Planners do not know city history. No seismic report? ***Did you see what happened in Florida? 98 people died under a fallen building that was only 40 years old. You want to approve a project with that kind of potential damage across from a 100 plus year old building that has a basement and tunnels with no safety studies? Again, I know your developer does not Google but maybe some of you should.*** The Planners in this City are, unfortunately, a lost cause – they seem to approve everything. Nothing was mentioned in the report about any of that. They simply said there would be underground parking. Maybe it just appears by itself without any heavy equipment, vibrations, and damage? Those are bricks on the façade of the Life Arts Building. Vibrations plus 100 year old masonry plus 100 year old bricks equals a disaster created by this City. Then again, the planners approved the brick façade on the building on Market street that then popped off, hitting pedestrians and creating a danger. And those were ***new bricks.***
11. **The Planners said that there would be no parking and this would create a greater shortage- and their response was that it really didn't matter-** we simply will not have parking. That is not planning. That is giving up. What happened to ***planning*** the city and its development??? We simple say “oh, well, no parking?” How is a hotel supposed to sell rooms with zero parking? “Welcome, please go find parking- you are on your own, and we have a shortage of police officers, and high car break in rates, so good luck with that.” Can you see the reviews? And the empty rooms? Nobody comes to Riverside without a car. We have no public airport with commercial flights. We have inadequate mass transit. There is no train from Ontario or LAX or OC. We may have it in the future- but we absolutely do not have it now. And this is in part a residential hotel for longer term guests. The chain attracts

contracts with companies sending workers for projects. It will attract families with hospitalized loved ones. It housed federal disaster teams in Northern and Central California. There is frequently more than one car per room. Would the City send staff to a hotel paid for by the City knowing the staff could not park their cars, and that they might incur damage to rental cars that the City would be liable for? Or would you look for a hotel with decent parking? Would you choose such a hotel for your own vacation? One where your car would not be on property and in danger of break in in a public lot with no security? RPD is doing its best with inadequate staffing and funding. We are all aware of it. It takes forty-five minutes for a call on domestic violence with a child present in my neighborhood. We have never had a response to fireworks- the city is just too big and too busy. We cannot ask our law enforcement to patrol parking lots for a hotel.

The City has done so much to create a vibrant downtown. We have a beautiful Mission Inn and a historic feel. Visitors stop and just look around in wonder at what we have. And we do have big hotels- but we have them where they belong: outside the historic core. They compliment it. They do not block the view. It makes far more sense to have more modern buildings that compliment the new Library and the other new hotels clustered together. The trolley could serve them better and more efficiently. We have empty lots on Market Street. It allows for security to be concentrated in one area. And it does not disrupt the historic area. ***That would be city planning, and use of space that makes sense.*** This project could fit there. The City could help with that. And the historic core would not be disrupted and put in danger.

In the City of Santa Fe, NM, there is a planning requirement that for buildings going up in the historic district that no building can be taller than the Cathedral. It keeps it human level, and attracts more visitors than would giant projects such as this. They protect what they have and care for it. They know it is an investment in their ongoing success. You have the ability to do that with the Mission Inn. Make it the focal point it should be.

The City insists we need hotel space. So be it. Make the space where it makes sense. Not on a one-acre parcel in a historic area with no parking to speak of, and one that disrupts the operations and endangers the historic buildings that have been there for over a century. Other hotels have come and gone in our city. But the downtown historic area is a point of pride and should not be disrupted by a mid-level price, overgrown hotel. That does not serve the city. It serves the developer. Serving the City is placing it in a space that makes sense, where parking is available and our cultural heritage is not compromised. And especially not without an EIR where the City knows there is fuel leakage under a building the City built and where that could be made worse by digging next to it. The Planners should have suggested that years ago.

Those backing it from the community have publicly attacked me. The mayor's aide mocked me on social media (not by name). The messaging is that without this hotel in

this space at this height with that many rooms we will be forever doomed to have a wasteland of homeless people assaulting citizens and defecating in our streets. Is that really how we see our City? Is that how *you* see it? One of the Downtown Partnership leaders told me we were dooming that parking lot to being a junkie and homeless den of violence and danger. Are you, as our elected leaders, incapable of creating a better use and leaving parking available? Why not a smaller version of the Food Lab in the old station and upgraded parking with better landscaping to welcome people downtown- and not a huge building towering overhead? Give the hotel the parking lot on Market adjacent to City Hall. Then ***you*** could have meeting space and house visitors. Just be ready to have construction 6 days a week 7a-7p. And angry customers with no parking. Or do this in an intelligent manner and move it to another site not in the historic area.

Thank you for reading this. I own a business and work during your meeting hours.

Sincerely,

Jill Johnson-Young, LCSW

2549 Flanders Rd

Riverside 92507

Member, First Congregational Church of Riverside

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
CEDD Director

Date: 8-17-21  
Item No.: 15

**From:** Nicolette Rohr <[nicolette.rohr@gmail.com](mailto:nicolette.rohr@gmail.com)>  
**Sent:** Saturday, August 7, 2021 8:15 AM  
**To:** Edwards, Erin <[EEdwards@riversideca.gov](mailto:EEdwards@riversideca.gov)>  
**Cc:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>  
**Subject:** [External] Protect Downtown - Oppose Marriott Project

Dear Councilmember Edwards,

I am writing in regard to the proposed Marriott hotel in downtown Riverside. I have several concerns about the project.

The proposed location at Mission Inn and Lemon is in the heart of downtown Riverside and directly adjacent to Riverside landmarks including the Riverside Art Museum, Municipal Auditorium, and First Congregational Church. These buildings, in particular, are central to the city and to the view of Riverside from the 91 freeway. The proposed structure would significantly interfere with the view of the city from the freeway, tarnishing the most common view of Riverside to many travelers, as well as obstruct the streetview, forever changing the local experience of the city for residents and visitors to downtown. This project would greatly disturb the character of downtown, long championed as "the heart of the city" and central to the "Riverside renaissance." I am not sure why the city would seek such obstruction or approve the many variances required of the project, undermining not only the historic district but also the entire planning process.

The Cultural Heritage Board had good reason to deny the request for the Certificate of Appropriateness and exemption from CEQA for this project. While I understand the developer has the right to appeal that decision, the City Council has no good reason to undermine the Cultural Heritage Board's commitment to the integrity of the historic district and concerns regarding the impact of the project.

This seems to be another example of a rushed and frankly unnecessary project that will benefit the developer but hurt the city. I am not at all opposed to development downtown, but it needs to be smart development and needs to maintain the character of the historic district, which is one of Riverside's greatest assets. After the city's investment in downtown Riverside as a historic district and cultural destination, allowing this project to go forward as it is would be deeply misguided.

Please let me know if you have any questions.

Thank you,

Nicolette Rohr

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
CEDD Director

# **EXHIBITS**

**SAFER's Supplemental CEQA Memo  
August 16, 2021**



# **EXHIBIT A**

## **Air Quality Analysis (SWAPE)**



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2656 29<sup>th</sup> Street, Suite 201  
Santa Monica, CA 90405

Matt Hagemann, P.G., C.Hg.  
(949) 887-9013  
[mhagemann@swape.com](mailto:mhagemann@swape.com)

Paul E. Rosenfeld, PhD  
(310) 795-2335  
[prosenfeld@swape.com](mailto:prosenfeld@swape.com)

April 27, 2021

Brian Flynn  
Lozeau | Drury LLP  
1939 Harrison Street, Suite 150  
Oakland, CA 94612

**Subject: Comments on Planning Cases P19-0560, P19-0561, and P19-056 Project**

---

Dear Mr. Flynn,

We have reviewed the April 2021 Planning Commission Memorandum ("Staff Report") and March 2021 Class 32 Infill Streamlining Checklist ("Checklist") for the AC Marriott and Residence Inn ("Project") located in the City of Riverside ("City"). The Project proposes to construct 226 hotel rooms, a 5,510-SF pool, 1,100-SF gym, and 173 parking spaces, as well as the operation of 12,000-SF of office space and 6,172-SF of storage space, on the 0.95-acre site.

*Our review concludes that the Checklist and Staff Report fail to adequately evaluate the Project's air quality impact. As a result of our findings, the proposed Project does not qualify for a Class 32 Exemption under the California Environmental Quality Act ("CEQA") and 14 Cal. Code of Regs. 1500 et seq. ("CEQA Guidelines") and, therefore, a full CEQA analysis must be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the Project may have on the surrounding environment. We recommend that the City prepare a subsequent EIR with a health risk assessment ("HRA") as required under the Commerce Municipal Code ("CMC" or "Code").*

## **Air Quality**

### **Incorrect Reliance on Class 32 Categorical Exemption**

The Staff Report claims that the Project is categorically exempt pursuant to CEQA Guidelines § 15332 (p. 7). According to CEQA Guidelines § 15332, a project can only be characterized as an in-fill development and qualify for a Class 32 Categorical Exemption if "approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality." The Checklist claims that the Project would result in less-than-significant air quality impacts, including traffic, noise, air quality, and

water quality impacts (pp. 14-20). However, this claim is unsubstantiated, as the Project's air quality analysis is insufficient for the following five reasons:

- (1) The Checklist relies upon an incorrect and unsubstantiated air model;
- (2) The Checklist fails to adequately evaluate the Project's health risk impacts;
- (3) SWAPE's updated analysis indicates potentially significant criteria pollutant emissions; and
- (4) SWAPE's screening-level health risk assessment indicates a potentially significant health risk impact.

### *1) Incorrect and Unsubstantiated Air Model*

The Project's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (Appendix E, p. 36).<sup>1</sup> CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.<sup>2</sup> Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollutant emissions and make known which default values were changed as well as provide justification for the values selected.<sup>3</sup>

When reviewing the Project's CalEEMod output files, provided in the Air Quality and Greenhouse Gas Emissions Impact Analysis ("AQ & GHG Analysis") as Appendix E to the Checklist, we found that several model inputs were not consistent with information disclosed in the Checklist and Staff Report. As a result, the Project's construction and operational emissions are underestimated. A full CEQA analysis should be prepared, including an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

### *Underestimated Land Use Size*

According to the Checklist, the Project proposes to construct 69,000-SF of parking and 10,500-SF of "Covered Passenger Drop-Off" space (see excerpt below) (pp. 6, Table 1).

---

<sup>1</sup> CAPCOA (November 2017) CalEEMod User's Guide, [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4).

<sup>2</sup> CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 9.

<sup>3</sup> CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 11, 12 – 13. A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.

Building Floor	Square Footage
Parking Level 3	23,000
Parking Level 2	23,000
Parking Level 1	23,000
Ground Floor	13,000
Covered Passenger Drop-Off	10,500
Second Floor	16,600
Third – Seventh Floor	17,800 ea. (89,000 total)
Eighth Floor	17,250
<b>TOTAL FLOOR AREA</b>	<b>215,350</b>

However, review of the CalEEMod output files demonstrates that the “Dual Brand Marriott Hotel” model only includes 3,200-SF of “Parking Lot” to account for the proposed “Covered Passenger Drop-Off” land use (see excerpt below) (Appendix E, pp. 65, 91, 118).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	18.40	1000sqft	0.10	18,415.00	0
Enclosed Parking with Elevator	171.00	Space	0.50	69,000.00	0
Parking Lot	8.00	Space	0.10	3,200.00	0
Hotel	226.00	Room	0.25	135,850.00	0

As you can see in the excerpt above, the floor surface area of the “Covered Passenger Drop-Off” land use is underestimated by approximately 7,300-SF. This presents an issue, as the land use size feature is used throughout CalEEMod to determine default variable and emission factors that go into the model’s calculations. The square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts).<sup>4</sup> Thus, by including an underestimated land use size, the model may underestimate the Project’s construction-related and operational emissions and should not be relied upon to determine Project significance.

### Failure to Model All Proposed Land Uses

According to the Checklist, the Project propose to include a 5,510-SF pool and 1,100-SF gym (p. 7). However, review of the CalEEMod output files demonstrates that the “Dual Brand Marriott Hotel” model fails to include the proposed pool or gym land uses (see excerpt below) (Appendix E, pp. 65, 91, 118).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	18.40	1000sqft	0.10	18,415.00	0
Enclosed Parking with Elevator	171.00	Space	0.50	69,000.00	0
Parking Lot	8.00	Space	0.10	3,200.00	0
Hotel	226.00	Room	0.25	135,850.00	0

<sup>4</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 28.

As you can see in the excerpt above, the model fails to include the proposed pool or gym land uses. These omissions presents an issue, as CalEEMod includes 63 different land use types that are each assigned a distinctive set of energy usage emission factors.<sup>5</sup> Furthermore, each land use type includes a specific trip rate that CalEEMod uses to calculate mobile-source emissions.<sup>6</sup> Thus, by failing to include all proposed land use types, the models may underestimate the Project’s construction-related and operational emissions and should not be relied upon to determine Project significance.

### Unsubstantiated Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files demonstrates that the “Dual Brand Marriott Hotel” model includes several changes to the default individual construction phase lengths (see excerpt below) (Appendix E, pp. 67, 93, 120).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	21.00
tblConstructionPhase	NumDays	100.00	220.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	21.00

As a result, the model includes a construction schedule as follows (see excerpt below) (Appendix E, pp. 70, 96, 114):

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Demolition	Demolition	6/1/2021	6/14/2021	5	10
2	Grading	Grading	6/15/2021	7/26/2021	5	30
3	Building Construction	Building Construction	7/27/2021	5/30/2022	5	220
4	Paving	Paving	5/1/2022	5/30/2022	5	21
5	Architectural Coating	Architectural Coating	5/1/2022	5/30/2022	5	21

As you can see in the excerpts above, the grading phase was increased by approximately 1,400%, from the default value of 2 to 30 days; the building construction phase was increased by approximately 120%, from the default value of 100 to 220 days; the paving phase was increased by approximately 320%, from the default value of 5 to 21 days; and the architectural coating phase was increased by 320%, from the default value of 5 to 21 days.

As previously mentioned, the CalEEMod User’s Guide requires any changes to model defaults be justified.<sup>7</sup> According to the “User Entered Comments and Non-Default Data” table, the justification

<sup>5</sup> “CalEEMod User’s Guide, Appendix D.” CAPCOA, September 2016, *available at*: [http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05\\_appendix-d2016-3-1.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2).

<sup>6</sup> CalEEMod User’s Guide, *available at*: [http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01\\_user-39-s-guide2016-3-1.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2), p. 14.

<sup>7</sup> CalEEMod User Guide, *available at*: <http://www.caleemod.com/>, p. 2, 9

provided for these changes is: “Construction schedule provided by applicant” (Appendix E, pp. 66, 92, 119). Furthermore, regarding the individual construction phase lengths, the AQ & GHG Analysis states:

“The demolition phase has been modeled as starting in June 2021 and occurring over two weeks... The grading phase was modeled as starting after completion of the demolition phase and occurring over six weeks... The building construction would occur after the completion of the grading phase and was modeled as occurring over ten months... The paving phase was modeled as occurring concurrently with the last month of the building construction phase... [and] The application of architectural coatings was modeled as occurring concurrently with the last month of the building construction phase” (emphasis added) (p. 37)

However, these changes remain unsupported. While the AQ & GHG Analysis describes how the individual construction phase lengths were modeled, the AQ & GHG Analysis fails to include a construction schedule provided by the Project applicant, as purported by the “User Entered Comments and Non-Default Data” table. This is incorrect, as simply providing the individual construction phase lengths assumed to estimate the Project’s emissions does not justify the revised phase lengths inputted into the model. Rather, according to the CalEEMod User’s Guide:

“CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.”<sup>8</sup>

Here, as the AQ & GHG Analysis fails to provide substantial evidence to support the revised individual construction phase lengths, we cannot verify the changes.

These unsubstantiated changes present an issue, as they disproportionately spread out construction emissions over a longer period of time for some phases, but not others. According to the CalEEMod User’s Guide, each construction phase is associated with different emissions activities (see excerpt below).<sup>9</sup>

---

<sup>8</sup> CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 12.

<sup>9</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 31.



Demolition involves removing buildings or structures.

Site Preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.

Grading involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.

Building Construction involves the construction of the foundation, structures and buildings.

Architectural Coating involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.

Paving involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

As such, by disproportionately altering individual construction phase lengths without proper justification, the model's calculations are altered and underestimate emissions. Thus, by including unsubstantiated increases to the default individual construction phase lengths, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

### Incorrect Application of Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Dual Brand Marriott Hotel" model includes the following mobile-, energy-, water-, and waste-related operational mitigation measures (see excerpt below) (Appendix E, pp. 84, 85, 89, 110, 111, 115, 138, 139, 145, 147):

#### Mobile-Related Mitigation Measures:

##### 4.1 Mitigation Measures Mobile

Increase Transit Accessibility  
Improve Pedestrian Network

#### Energy-Related Mitigation Measures:

##### 5.1 Mitigation Measures Energy

Exceed Title 24  
Install High Efficiency Lighting

## Water-Related Mitigation Measures:

### **7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet  
Install Low Flow Kitchen Faucet  
Install Low Flow Toilet  
Install Low Flow Shower  
Use Water Efficient Irrigation System

## Waste-Related Mitigation Measure:

### **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.<sup>10</sup> According to the "User Entered Comments and Non-Default Data" table, the justifications provided for the mobile-, energy-, water-, and waste-related operational mitigation measures are:

- "Increase Transit Accessibility 0.02 mile from Riverside Transit Lemon & University Bus Stop. Improve Ped Network onsite and connecting offsite";
- "Per 2019 Title 24 requirements a 30% improvement to Title 24 and lighting energy were selected";
- "Install low-flow fixtures and water-efficient irrigation"; and
- "50% reduction in solid waste selected to account for AB 341," respectively (Appendix E, pp. 66, 92, 119).

Furthermore, regarding the use of mobile-related mitigation, the AQ & GHG Analysis states:

"The mobile source emissions analysis for the Project included the CalEEMod 'mitigation' of improved pedestrian network onsite and connecting offsite, and increase transit accessibility with 0.02 mile to the nearest transit to account for the existing Riverside Transit Lemon and University bus stop located as near as 145 feet south of the project site" (p. 38)

Regarding the use of energy-related mitigation, the AQ & GHG Analysis states:

"In order to account for the new standards, the CalEEMod 'mitigation' of 30 percent improvement to Title 24 and a 30 percent lighting energy improvement were selected" (p. 38).

Regarding the use of waste-related mitigation, the AQ & GHG Analysis states:

---

<sup>10</sup> CalEEMod User Guide, *available at*: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 2, 9



“The CalEEMod ‘mitigation’ of a 50 percent reduction in landfill waste was selected to account for implementation of AB 341 that provides strategies to reduce, recycle or compost solid waste by 75 percent by 2020. Only 50 percent was selected, since AB 341 builds upon the waste reduction measures of SB 939 and 1374 and therefore, it was assumed approximately 25 percent of the waste reduction target has already been accounted for in the CalEEMod model” (p. 39).

Finally, regarding the use of water-related mitigation, the AQ & GHG Analysis states:

“The CalEEMod ‘mitigation’ of the use of low flow faucets, showers, and toilets and use of smart irrigation system controllers were selected to account for the implementation of the 2016 CCR Title 24 Part 11 (CalGreen) requirements” (p. 39).

However, the inclusion of the above-mentioned operational mitigation measures remains unsubstantiated for three reasons.

First, simply because the AQ & GHG Analysis states that the Project would comply with applicable regulations and policies does not justify the inclusion of the above-mentioned operational mitigation measures in the model. According to the Association of Environmental Professionals’ (“AEP”) *CEQA Portal Topic Paper* on mitigation measures:

*“By definition, mitigation measures are not part of the original project design. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are above-and-beyond existing laws, regulations, and requirements that would reduce environmental impacts” (emphasis added).*<sup>11</sup>

As you can see in the excerpt above, mitigation measures “are not part of the original project design” and are intended to go “above-and-beyond” existing regulatory requirements.

Second, the paper states:

*“While not “mitigation”, a good practice is to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP). Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact” (emphasis added).*<sup>12</sup>

---

<sup>11</sup> “CEQA Portal Topic Paper Mitigation Measures.” AEP, February 2020, available at: <https://cegaportal.org/tp/CEQA%20Mitigation%202020.pdf>, p. 5.

<sup>12</sup> “CEQA Portal Topic Paper Mitigation Measures.” AEP, February 2020, available at: <https://cegaportal.org/tp/CEQA%20Mitigation%202020.pdf>, p. 6.

As you can see in the excerpts above, project design features are not mitigation measures and may be eliminated from the Project's design. Thus, as the above-mentioned operational mitigation measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site.

Third, regarding the Project's air quality impacts, the AQ & GHG Analysis states:

"The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, a less than significant long-term impact would occur and no mitigation would be required" (emphasis added) (p. 44)

As demonstrated above, the AQ & GHG Analysis claims that no mitigation measures would be required. However, while the AQ & GHG Analysis concludes that no mitigation measures would be required to reduce emissions to less-than-significant levels, the Project's modeling incorporates mitigation measures to reduce emissions to less-than-significant levels. If the less-than-significant impact conclusion was correct, the above-mentioned operational mitigation measure should not have been included in the model.

By incorrectly including several mobile-, energy-, water-, and waste-related operational mitigation measures without properly committing to their implementation, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance.

## 2) Updated Analysis Indicates Significant Air Quality Impact

In an effort to more accurately estimate Project's construction-related and operational emissions, we prepared updated CalEEMod models, using the Project-specific information provided by the Checklist. In our updated models, we corrected the land use types and sizes; omitted the unsubstantiated changes to the individual construction phase lengths; and excluded the unsubstantiated operational mitigation measures. Our updated analysis estimates that the Project's construction-related VOC and NO<sub>x</sub> exceed the applicable SCAQMD thresholds of 75- and 100-pounds per day ("lbs/day"), respectively (see table below).<sup>13</sup>

Model	VOC	NOX
Staff Report Construction	71.26	29.44
SWAPE Construction	324.65	176.95
% Increase	356%	501%
<b>SCAQMD Regional Threshold (lbs/day)</b>	<b>75</b>	<b>100</b>
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>

As you can see in the excerpt above, the Project's construction-related VOC and NO<sub>x</sub> emissions, as estimated by SWAPE, increase by approximately 356% and 501%, respectively, and exceed the applicable SCAQMD significance thresholds. Thus, our model demonstrates that the Project would result

<sup>13</sup> "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, available at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

in a potentially significant air quality impact that was not previously identified or addressed in the Staff Report. As a result, a subsequent EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment.

### *3) Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated*

The AQ & GHG Analysis concludes that the proposed Project would have a less-than-significant health risk impact, without conducting a quantified construction or operational health risk analysis (“HRA”) (Appendix E, p. 49-51). Specifically, regarding potential health risk impacts associated with Project construction, the AQ & GHG Analysis states:

“Given the relatively limited number of heavy-duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk... Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project. As such, construction of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations” (p. 49-50).

As demonstrated above, the AQ & GHG Analysis concludes that the Project would result in a less-than-significant construction-related health risk impact because the number of heavy-duty construction equipment would be limited and construction would not result in a long-term source of toxic air contaminant (“TAC”) emissions. Furthermore, regarding potential health risk impacts associated with Project operation, the AQ & GHG Analysis states:

“The proposed project would consist of the development of a dual brand Marriott hotel and creative office that would only generate a nominal number of diesel-powered delivery vehicle trips. Since the proposed project would generate well below the 100 trucks per day threshold that would have the potential to create a significant TAC impact at the nearby sensitive receptors as determined by CAPCOA’s screening criteria, a less than significant TAC impact would occur during the on-going operations of the proposed project and no mitigation would be required. Therefore, operation of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations” (p. 50-51).

As demonstrated above, the AQ & GHG Analysis concludes that the Project would result in a less-than-significant operational health risk impact because the Project would not generate more than 100 diesel-powered truck trips. However, the AQ & GHG Analysis’ evaluation of the Project’s potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

First, the Staff Report and AQ & GHG Analysis fail to quantitatively evaluate the Project’s construction-related and operational TAC emissions or make a reasonable effort to connect these emissions to potential health risk impacts posed to nearby existing sensitive receptors. Despite the AQ & GHG Analysis’ qualitative claims that construction-related TAC emissions would be less-than-significant, construction of the proposed Project would produce diesel particulate matter (“DPM”) emissions

through the exhaust stacks of construction equipment over the entire construction duration. Furthermore, despite the AQ & GHG Analysis' qualitative claim that the proposed land uses would not generate a significant number of diesel-powered truck trips, the Traffic Impact Analysis ("TIA"), provided as Appendix B to the Checklist, indicates that Project is expected to generate approximately 1,016 average daily vehicle trips, respectively, which would generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (Appendix B, p. 16, Table 3-2). However, the AQ & GHG Analysis' vague discussion of potential Project-generated TACs fails to indicate the concentrations at which such pollutants would trigger adverse health effects. Thus, without making a reasonable effort to connect the Project's construction-related and operational TAC emissions to the potential health risks posed to nearby receptors, the Project is inconsistent with CEQA's requirement to correlate the increase in TAC emissions with potential adverse impacts on human health.

Second, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by the AQ & GHG Analysis (p. 49).<sup>14</sup> This guidance document describes the types of projects that warrant the preparation of an HRA. The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors. As the Project's construction duration vastly exceeds the 2-month requirement set forth by OEHHA, it is clear that the Project meets the threshold warranting a quantified HRA under OEHHA guidance. Furthermore, the OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR"). Even though we were not provided with the expected lifetime of the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. These recommendations reflect the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions be included in an EIR for the Project.

Third, by claiming a less than significant impact without conducting a quantified construction or operational HRA for nearby, existing sensitive receptors, the AQ & GHG Analysis fails to compare the excess health risk impact to the applicable SCAQMD threshold of 10 in one million and lacks evidence to support its conclusion that the health risk would be under the threshold.<sup>15</sup> Thus, pursuant to CEQA, an analysis of the health risk posed to nearby, existing receptors from Project construction and operation should have been conducted.

---

<sup>14</sup> "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: [http://oehha.ca.gov/air/hot\\_spots/hotspots2015.html](http://oehha.ca.gov/air/hot_spots/hotspots2015.html).

<sup>15</sup> "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, available at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

#### 4) Updated Analysis Indicates Significant Health Risk Impact

In order to conduct our screening-level risk analysis we relied upon AERSCREEN, which is a screening level air quality dispersion model.<sup>16</sup> The model replaced SCREEN3, and AERSCREEN is included in the OEHHA<sup>17</sup> and the California Air Pollution Control Officers Associated (“CAPCOA”)<sup>18</sup> guidance as the appropriate air dispersion model for Level 2 health risk screening analyses (“HRSAs”). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

In order to estimate the health risk impacts posed to residential sensitive receptors as a result of the Project’s construction-related and operational TAC emissions, we prepared a preliminary HRA using the annual PM<sub>10</sub> exhaust estimates from the AQ & GHG Analysis’ CalEEMod output files. Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life. The AQ & GHG Analysis’ CalEEMod model indicates that construction activities will generate approximately 61 pounds of DPM over the 363-day construction period. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

$$\text{Emission Rate} \left( \frac{\text{grams}}{\text{second}} \right) = \frac{60.8 \text{ lbs}}{987 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.000879 \text{ g/s}}$$

Using this equation, we estimated a construction emission rate of 0.000879 grams per second (“g/s”). Subtracting the 363-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project’s operational DPM for an additional 29.01 years, approximately. The Staff Report’s operational CalEEMod emissions indicate that operational activities will generate approximately 60 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

$$\text{Emission Rate} \left( \frac{\text{grams}}{\text{second}} \right) = \frac{60.0 \text{ lbs}}{365 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.000863 \text{ g/s}}$$

Using this equation, we estimated an operational emission rate of 0.000863 g/s. Construction and operational activity was simulated as a 0.95-acre rectangular area source in AERSCREEN with dimensions of 70 by 55 meters. A release height of three meters was selected to represent the height of exhaust

---

<sup>16</sup> U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, [http://www.epa.gov/ttn/scram/guidance/clarification/20110411\\_AERSCREEN\\_Release\\_Memo.pdf](http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf)

<sup>17</sup> “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: [http://oehha.ca.gov/air/hot\\_spots/2015/2015GuidanceManual.pdf](http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf)

<sup>18</sup> CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, [http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA\\_HRA\\_LU\\_Guidelines\\_8-6-09.pdf](http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf).

stacks on operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10%.<sup>19</sup> According to the AQ & GHG Analysis, “[t]he nearest sensitive receptor to the project site is a multi-family home located as near as 300 feet [91 meters] to the northeast of the project site” (p. 1). Thus, the single-hour concentration estimated by AERSCREEN for Project construction is approximately 1.336  $\mu\text{g}/\text{m}^3$  DPM at approximately 100 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1336  $\mu\text{g}/\text{m}^3$  for Project construction at the MEIR. For Project operation, the single-hour concentration estimated by AERSCREEN is 1.312  $\mu\text{g}/\text{m}^3$  DPM at approximately 100 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1312  $\mu\text{g}/\text{m}^3$  for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the 363-day construction schedule included in the Project’s CalEEMod output files, the annualized average concentration for Project construction was used for the entire third trimester of pregnancy (0.25 years) and the first 0.74 years of the infantile stage of life (0 – 2 years); and the annualized averaged concentration for operation was used for the remainder of the 30-year exposure period, which makes up the remaining 1.26 years of the infantile stage of life, and the entire child stage of life (2 – 16 years) and adult stage of life (16 – 30 years).

Consistent with OEHHA guidance and recommended by the SCAQMD, BAAQMD, and SJVAPCD guidance, we used Age Sensitivity Factors (“ASF”) to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.<sup>20, 21, 22</sup> According to this guidance, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years).

---

<sup>19</sup> “Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised.” EPA, 1992, *available at*: [http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019\\_OCR.pdf](http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf); *see also* “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, *available at*: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf> p. 4-36.

<sup>20</sup> “Draft Environmental Impact Report (DEIR) for the Proposed The Exchange (SCH No. 2018071058).” SCAQMD, March 2019, *available at*: <http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/march/RVC190115-03.pdf?sfvrsn=8>, p. 4.

<sup>21</sup> “California Environmental Quality Act Air Quality Guidelines.” BAAQMD, May 2017, *available at*: [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), p. 56; *see also* “Recommended Methods for Screening and Modeling Local Risks and Hazards.” BAAQMD, May 2011, *available at*: <http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20Modeling%20Approach.ashx>, p. 65, 86.

<sup>22</sup> “Update to District’s Risk Management Policy to Address OEHHA’s Revised Risk Assessment Guidance Document.” SJVAPCD, May 2015, *available at*: <https://www.valleyair.org/busind/pto/staff-report-5-28-15.pdf>, p. 8, 20, 24.

We also included the quantified cancer risk without adjusting for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution in accordance with older OEHHA guidance from 2003. This guidance utilizes a less health protective scenario than what is currently recommended by SCAQMD, the air quality district with jurisdiction over the City, and several other air districts in the state. Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95<sup>th</sup> percentile breathing rates for infants.<sup>23</sup> Finally, according to SCAQMD guidance, we used a Fraction of Time At Home (“FAH”) Value of 1 for the 3<sup>rd</sup> trimester and infant receptors.<sup>24</sup> We used a cancer potency factor of 1.1 (mg/kg-day)<sup>-1</sup> and an averaging time of 25,550 days. The results of our calculations are shown below.

**The Closest Exposed Individual at an Existing Residential Receptor**

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	Cancer Risk without ASFs*	ASF	Cancer Risk with ASFs*
Construction	0.25	0.1336	361	1.8E-07	10	1.8E-06
<b>3rd Trimester Duration</b>	<b>0.25</b>			<b>1.8E-07</b>	<b>3rd Trimester Exposure</b>	<b>1.8E-06</b>
Construction	0.74	0.1336	1090	1.6E-06	10	1.6E-05
Operation	1.26	0.1312	1090	2.7E-06	10	2.7E-05
<b>Infant Exposure Duration</b>	<b>2.00</b>			<b>4.3E-06</b>	<b>Infant Exposure</b>	<b>4.3E-05</b>
Operation	14.00	0.1312	572	1.6E-05	3	4.7E-05
<b>Child Exposure Duration</b>	<b>14.00</b>			<b>1.6E-05</b>	<b>Child Exposure</b>	<b>4.7E-05</b>
Operation	14.00	0.1312	261	5.3E-06	1	5.3E-06
<b>Adult Exposure Duration</b>	<b>14.00</b>			<b>5.3E-06</b>	<b>Adult Exposure</b>	<b>5.3E-06</b>
<b>Lifetime Exposure Duration</b>	<b>30.00</b>			<b>2.6E-05</b>	<b>Lifetime Exposure</b>	<b>9.8E-05</b>

\* We, along with CARB and SCAQMD, recommend using the more updated and health protective 2015 OEHHA guidance, which includes ASFs.

As demonstrated in the table above, the excess cancer risk to adults, children, infants, and during the 3<sup>rd</sup> trimester of pregnancy at the MEIR located approximately 100 meters away, over the course of Project construction and operation, utilizing ASFs, is approximately 5.3, 47, 43, and 1.8 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years), utilizing ASFs, is approximately 98 in one million. The infant, child, and lifetime cancer risks exceed the SCAQMD

<sup>23</sup> “Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics ‘Hot Spots’ Information and Assessment Act,” July 2018, available at: <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf>, p. 16.

“Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>

<sup>24</sup> “Risk Assessment Procedures for Rules 1401, 1401.1, and 212.” SCAQMD, August 2017, available at: [http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures\\_2017\\_080717.pdf](http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf), p. 7.



threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified by the Checklist, Staff Report, or AQ & GHG Analysis.

Utilizing ASFs is the most conservative, health-protective analysis according to the most recent guidance by OEHHA and reflects recommendations from the air district. Results without ASFs are presented in the table above, although we **do not** recommend utilizing these values for health risk analysis. Regardless, the excess cancer risk to adults, children, infants, and during the 3<sup>rd</sup> trimester of pregnancy at the MEIR located approximately 100 meters away, over the course of Project construction and operation, without ASFs, are approximately 5.3, 16, 4.3, and 0.18 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years), without ASFs, is approximately 26 in one million. The child and lifetime cancer risk, without ASFs, exceed the SCAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified by the Checklist, Staff Report, or AQ & GHG Analysis. While we recommend the use of ASFs, the Project's cancer risk without ASFs, as estimated by SWAPE, nonetheless exceeds the SCAQMD threshold, resulting in a potentially significant health risk impact that the Checklist, Staff Report, and AQ & GHG Analysis fail to disclose.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection.<sup>25</sup> The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level HRA indicates a potentially significant impact, the City should prepare a Project-specific EIR with an HRA which makes a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, the City should prepare an updated, quantified air pollution model as well as an updated, quantified refined health risk analysis which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

## Greenhouse Gas

### Failure to Adequately Evaluate Greenhouse Gas Emissions

The AQ & GHG Analysis estimates that the Project would result in net annual greenhouse gas ("GHG") emissions of 2,958.83 metric tons of carbon dioxide equivalents per year ("MT CO<sub>2</sub>e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO<sub>2</sub>e/year (see excerpt below) (Appendix E, p. 52, Table M).

---

<sup>25</sup> "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 1-5



**Table M – Project Related Greenhouse Gas Annual Emissions**

Category	Greenhouse Gas Emissions (Metric Tons per Year)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Area Sources <sup>1</sup>	0.01	<0.00	<0.00	0.01
Energy Usage <sup>2</sup>	1,763.51	0.04	0.01	1,768.14
Mobile Sources <sup>3</sup>	1,056.56	0.07	0.00	1,058.24
Solid Waste <sup>4</sup>	14.29	0.84	0.00	35.41
Water and Wastewater <sup>5</sup>	75.25	0.24	0.01	82.90
Construction <sup>6</sup>	14.07	0.00	0.00	14.12
<b>Total GHG Emissions</b>	<b>2,923.69</b>	<b>1.19</b>	<b>0.02</b>	<b>2,958.83</b>
<b>SCAQMD Draft Threshold of Significance</b>				<b>3,000</b>
<b>Exceed Screening Threshold?</b>				No

Notes:

<sup>1</sup> Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.

<sup>2</sup> Energy usage consists of GHG emissions from electricity and natural gas usage.

<sup>3</sup> Mobile sources consist of GHG emissions from vehicles.

<sup>4</sup> Waste includes the CO<sub>2</sub> and CH<sub>4</sub> emissions created from the solid waste placed in landfills.

<sup>5</sup> Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

<sup>6</sup> Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.

Source: CalEEMod Version 2016.3.2.

Furthermore, the AQ & GHG Report relies upon the Project's consistency with the City's Climate Action Plan ("CAP") in order to conclude that the Project would result in a less-than-significant GHG impact (p. 53). However, the AQ & GHG Report's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

- (1) The Project's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
- (2) The Project relies upon an incorrect threshold;
- (3) The Project's unsubstantiated air model indicates a potentially significant impact;
- (4) SWAPE's updated analysis indicates a potentially significant GHG impact; and
- (5) The Staff Report incorrectly relies upon the City's CAP.

### *1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions*

As previously stated, AQ & GHG Analysis estimates that the Project would generate net annual GHG emissions of 2,958.83 MT CO<sub>2</sub>e/year (Appendix E, p. 52, Table M). However, the Project's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQ & GHG Analysis as Appendix E to the Staff Report, we found that several of the values inputted into the model are not consistent with information disclosed in the Checklist and Staff Report. As a result, the model underestimates the Project's emissions, and the Project's quantitative GHG analysis should not be relied upon to determine Project significance. An EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

### *2) Incorrect Reliance on an Outdated Quantitative GHG Threshold*

As previously discussed, the AQ & GHG Analysis estimates that the Project would generate net annual GHG emissions of 2,958.83 MT CO<sub>2</sub>e/year, which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO<sub>2</sub>e/year (Appendix E, p. 52, Table M). However, the guidance that provided the 3,000

MTCO<sub>2</sub>/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.<sup>26</sup> As it is already April 2021, thresholds for 2020 are not applicable to the proposed Project. As such, the SCAQMD bright-line threshold of 3,000 MT CO<sub>2</sub>e/year is outdated and inapplicable to the proposed Project, and the Staff Report's less-than-significant GHG impact conclusion should not be relied upon.

Instead, we recommend that the Project apply the widely-used 2030 "Substantial Progress" threshold of 660 MT CO<sub>2</sub>e/year<sup>27</sup> and AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO<sub>2</sub> equivalents per service population per year ("MT CO<sub>2</sub>e/SP/year").<sup>28</sup> In support of this threshold for projects with a horizon year beyond 2020, AEP's guidance *states*:

"Once the state has a full plan for 2030 (which is expected in 2017), and then a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target. A more conservative approach would be to apply a 2030 threshold based on SB 32 for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).<sup>29</sup>

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend the preparation of a subsequent EIR to compare the Project's estimated GHG emissions, as estimated in an updated air model, to the widely-used 2030 "Substantial Progress" threshold of 660 MT CO<sub>2</sub>e/year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO<sub>2</sub>e/SP/year.

### 3) *Failure to Identify a Potentially Significant Impact*

As previously stated, the AQ & GHG Analysis estimates that the Project would generate net annual GHG emissions of 2,958.83 MT CO<sub>2</sub>e/year (Appendix E, p. 52, Table M). When applying the widely-used 2030

---

<sup>26</sup> HEALTH & SAFETY CODE 38550, *available at*:

[https://leginfo.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=HSC&sectionNum=38550](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550).

<sup>27</sup> See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at*:

[https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK\\_TbVP3sWar00-Zx87dh7ji80vbRH0](https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0), p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at*: "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: [https://www.fremont.gov/DocumentCenter/View/44974/4\\_Appendix-1\\_Air-Quality-GHG-Assessment](https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment), p. 18; and <https://www.sanjoseca.gov/Home/ShowDocument?id=45200>, p. 6.

<sup>28</sup> "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at*: [https://califaep.org/docs/AEP-2016\\_Final\\_White\\_Paper.pdf](https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf), p. 40.

<sup>29</sup> "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at*: [https://califaep.org/docs/AEP-2016\\_Final\\_White\\_Paper.pdf](https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf), p. 40.

“Substantial Progress” threshold of 660 MT CO<sub>2</sub>e/year,<sup>30</sup> the Project’s incorrect and unsubstantiated air model indicates a potentially significant GHG impact (see excerpt below).

Staff Report Modeling Greenhouse Gas Emissions	
Project Phase	Proposed Project (MT CO <sub>2</sub> e/year)
Net Annual GHG Emissions	2,959
Threshold	660
<b>Exceed?</b>	<b>Yes</b>

As demonstrated above, the Project’s net annual GHG emissions, as estimated by the AQ & GHG Analysis, exceed the 2030 “Substantial Progress” threshold of 660 MT CO<sub>2</sub>e/year. As the Checklist, Staff Report, and AQ & GHG Analysis fail to provide the Project’s estimated number of employees, we are unable to compare the Project’s emissions to the AEP’s “2030 Land Use Efficiency Threshold” of 2.6 MT CO<sub>2</sub>e/SP/year. Nonetheless, an EIR should be prepared for the Project and mitigation measures should be implemented to reduce the Project’s GHG emissions to less-than-significant levels.

#### 4) *Updated Analysis Indicates a Potentially Significant GHG Impact*

SWAPE’s updated air model indicates a potentially significant GHG impact, when applying the outdated SCAQMD threshold of 3,000 MT CO<sub>2</sub>e/year and the 2030 “Substantial Progress” threshold of 660 MT CO<sub>2</sub>e/year. The updated CalEEMod output files, modeled by SWAPE with Project-specific information, disclose the Project’s mitigated emissions, which include approximately 628 MT CO<sub>2</sub>e of total construction emissions (sum of 2021 and 2022) and approximately 3,829 MT CO<sub>2</sub>e/year of net annual operational emissions (sum of area-, energy-, mobile-, waste-, and water-related emissions). When amortizing the Project’s construction-related GHG emissions over a period of 30 years and summing them with the Project’s operational GHG emissions, we estimate net annual GHG emissions of 3,850 MT CO<sub>2</sub>e/year (see table below).

<sup>30</sup> See: “JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT.” City of Daly City, June 2019, *available at*: [https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK\\_TbVP3sWar00-Zx87dh7ji80vbRH0](https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0), p. 7; “TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT.” City of Fremont, February 2020, *available at*: “SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT.” City of San Jose, September 2019, *available at*: [https://www.fremont.gov/DocumentCenter/View/44974/4\\_Appendix-1\\_Air-Quality-GHG-Assessment](https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment), p. 18; and <https://www.sanjoseca.gov/Home/ShowDocument?id=45200>, p. 6.

<b>SWAPE Greenhouse Gas Emissions</b>	
<b>Project Phase</b>	<b>Proposed Project (MT CO<sub>2</sub>e/year)</b>
Construction (amortized over 30 years)	20.95
Area	0.01
Energy	2,285.74
Mobile	1,347.80
Waste	89.78
Water	105.76
<b>Net Annual GHG Emissions</b>	<b>3,850</b>
Threshold	3,000
<b><i>Exceed?</i></b>	<b><i>Yes</i></b>
Threshold	660
<b><i>Exceed?</i></b>	<b><i>Yes</i></b>

As demonstrated above, the Project's estimated net annual GHG emissions exceed the outdated SCAQMD bright-line threshold of 3,000 MT CO<sub>2</sub>e/year, as well as the 2030 "Substantial Progress" threshold of 660 MT CO<sub>2</sub>e/year, thus resulting in a significant impact not previously addressed by the Checklist, Staff Report, or AQ & GHG Analysis. An updated GHG analysis should be prepared in an EIR and additional mitigation should be incorporated accordingly, per CEQA Guidelines.

#### *5) Incorrect Reliance on the City's CAP*

As previously mentioned, the AQ & GHG Analysis relies upon the Project's consistency with the City's CAP in order to conclude that the Project would have a less-than-significant GHG impact (Appendix E, p. 53-55). Specifically, according to the AQ & GHG Analysis:

"[T]he proposed project is consistent with the applicable local measures provided in the Climate Action Plan. Therefore, the proposed project would comply with the Climate Action Plan reduction targets and would not conflict with the applicable plan for reducing GHG emissions. Impacts would be less than significant" (Appendix E, p. 55).

However, this is incorrect, as the City's CAP is not qualified to determine the significance of the Project's GHG impact. According to the City's CAP:

"In 2014 Riverside was one of twelve cities that collaborated with the Western Riverside Council of Governments (WRCOG) on a Subregional Climate Action Plan (Subregional CAP) that includes 36 measures to guide Riverside's GHG reduction efforts through 2020."<sup>31</sup>

<sup>31</sup> "Economic Prosperity Action Plan and Climate Action Plan." City of Riverside, January 2016, available at: <https://corweb.riversideca.gov/cedd/sites/riversideca.gov.chedd/files/pdf/planning/other-plans/2016%20Riverside%20Restorative%20Growthprint%20Economic%20Proposerity%20Action%20Plan%20and%20Climate%20Action%20Plan.pdf>, p. 1-1.

As such, the City's CAP is not qualified beyond 2020. Given that it is April 2021, the City's CAP is outdated and inapplicable to the proposed Project. Furthermore, AEP's *Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California* states:

"Projects with a horizon year (e.g. the year in which the project is fully realized) beyond 2020 should not tier from a GHG reduction plan that may be qualified up to 2020 but is not yet qualified for a post-2020 period" (emphasis added).<sup>32</sup>

As you can see in the excerpt above, projects that will become operational beyond 2020 should not tier from CAPs only qualified up to 2020. As such, the City's CAP, which is only qualified up to 2020, should not be relied upon to determine Project significance. As a result, the Project's less-than-significant impact conclusion regarding the City's CAP should not be relied upon.

### Design Features Should Be Included as Mitigation Measures

Our analysis demonstrates that the Project would result in potentially significant air quality, health risk, and GHG impacts that should be mitigated further. As previously discussed, the AQ & GHG Analysis mentions the inclusion of several mobile-, energy-, waste-, and water-related operational measures, but does not commit to their implementation. We recommend that the Project implement these design features and compliance measures as formal mitigation measures. As a result, we could guarantee that these measures would be implemented, monitored, and enforced on the Project site. Including formal mitigation measures by properly committing to their implementation would result in verifiable emissions reductions that may help reduce the Project's emissions to less-than-significant levels.

### Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

---

<sup>32</sup> "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, available at: [https://califaep.org/docs/AEP-2016\\_Final\\_White\\_Paper.pdf](https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf), p. 38.



Matt Hagemann, P.G., C.Hg.



Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE Health Risk Calculations
Attachment B:	SWAPE Project CalEEMod Modeling
Attachment C:	SWAPE Project AERSCREEN Modeling
Attachment D:	Paul Rosenfeld CV
Attachment E:	Matt Hagemann CV

# Attachment A

Construction			
2021		Total	
Annual Emissions (tons/year)	0.0351	Total DPM (lbs)	60.80547945
Daily Emissions (lbs/day)	0.192328767	Total DPM (g)	27581.36548
Construction Duration (days)	213	Total Construction Days	363
Total DPM (lbs)	40.9660274	Emission Rate (g/s)	0.000879
Total DPM (g)	18582.19003	Release Height (meters)	3
Start Date	6/1/2021	Initial Vertical Dimension (meters)	1.5
End Date	12/31/2021	Max Horizontal (meters)	70.0
Construction Days	213	Min Horizontal (meters)	55.0
2022		Total Acreage	0.951354878
Annual Emissions (tons/year)	0.0243	Setting	Urban
Daily Emissions (lbs/day)	0.133150685	Population	326,414
Construction Duration (days)	149	Start Date	6/1/2021
Total DPM (lbs)	19.83945205	End Date	5/30/2022
Total DPM (g)	8999.175452	Total Construction Days	363
Start Date	1/1/2022	Total Years of Operation	29.01
End Date	5/30/2022		
Construction Days	149		

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.03
Daily Emissions (lbs/day)	0.164383562
Emission Rate (g/s)	0.000863
Release Height (meters)	3
Initial Vertical Dimension (meters)	1.5
Max Horizontal (meters)	70.0
Min Horizontal (meters)	55.0
Total Acreage	0.951354878
Setting	Urban
Population	326,414
Total Pounds of DPM	
Total DPM (lbs)	60.00

**The Closest Exposed Individual at an Existing Residential Receptor**

<b>Activity</b>	<b>Duration (years)</b>	<b>Concentration (ug/m3)</b>	<b>Breathing Rate (L/kg-day)</b>	<b>Cancer Risk without ASFs*</b>	<b>ASF</b>	<b>Cancer Risk with ASFs*</b>
Construction	0.25	0.1336	361	1.8E-07	10	1.8E-06
<b><i>3rd Trimester Duration</i></b>	<b><i>0.25</i></b>			<b><i>1.8E-07</i></b>	<b><i>3rd Trimester Exposure</i></b>	<b><i>1.8E-06</i></b>
Construction	0.74	0.1336	1090	1.6E-06	10	1.6E-05
Operation	1.26	0.1312	1090	2.7E-06	10	2.7E-05
<b><i>Infant Exposure Duration</i></b>	<b><i>2.00</i></b>			<b><i>4.3E-06</i></b>	<b><i>Infant Exposure</i></b>	<b><i>4.3E-05</i></b>
Operation	14.00	0.1312	572	1.6E-05	3	4.7E-05
<b><i>Child Exposure Duration</i></b>	<b><i>14.00</i></b>			<b><i>1.6E-05</i></b>	<b><i>Child Exposure</i></b>	<b><i>4.7E-05</i></b>
Operation	14.00	0.1312	261	5.3E-06	1	5.3E-06
<b><i>Adult Exposure Duration</i></b>	<b><i>14.00</i></b>			<b><i>5.3E-06</i></b>	<b><i>Adult Exposure</i></b>	<b><i>5.3E-06</i></b>
<b>Lifetime Exposure Duration</b>	<b>30.00</b>			<b>2.6E-05</b>	<b>Lifetime Exposure</b>	<b>9.8E-05</b>

\* We, along with CARB and SCAQMD, recommend using the more updated and health protective 2015 OEHHA guidance, which includes ASFs.



## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

## Dual Brand Marriot Hotel

### Riverside-South Coast County, Annual

## 1.0 Project Characteristics

---

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	18.40	1000sqft	0.10	18,415.00	0
Enclosed Parking with Elevator	171.00	Space	0.50	69,000.00	0
Parking Lot	8.00	Space	0.10	10,500.00	0
Health Club	1.10	1000sqft	0.03	1,100.00	0
Hotel	226.00	Room	0.25	135,850.00	0
Recreational Swimming Pool	5.51	1000sqft	0.13	5,510.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Project Characteristics - Consistent with the Staff Report's model.

Land Use - See SWAPE comment regarding underestimated land use size and the failure to model all proposed land uses.

Construction Phase - See SWAPE comment regarding the individual construction phase lengths.

Trips and VMT - Consistent with the Staff Report's model.

Demolition - Consistent with the Staff Report's model.

Grading - Consistent with the Staff Report's model.

Vehicle Trips - Consistent with the Staff Report's model.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation.

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	35,000.00
tblLandUse	LandUseSquareFeet	18,400.00	18,415.00
tblLandUse	LandUseSquareFeet	68,400.00	69,000.00
tblLandUse	LandUseSquareFeet	3,200.00	10,500.00
tblLandUse	LandUseSquareFeet	328,152.00	135,850.00
tblLandUse	LotAcreage	0.42	0.10
tblLandUse	LotAcreage	1.54	0.50
tblLandUse	LotAcreage	0.07	0.10
tblLandUse	LotAcreage	7.53	0.25
tblTripsAndVMT	HaulingTripLength	20.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	ST_TR	2.46	11.31
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	8.19	4.02
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	1.05	11.31
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	5.95	4.02
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	11.03	11.31
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.17	4.02
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

## 2.1 Overall Construction

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2073	1.9103	1.4754	4.8400e-003	0.1948	0.0585	0.2533	0.0554	0.0560	0.1114	0.0000	436.6815	436.6815	0.0463	0.0000	437.8383
2022	1.7176	0.7296	0.7451	2.1400e-003	0.0886	0.0242	0.1127	0.0239	0.0232	0.0471	0.0000	190.1074	190.1074	0.0190	0.0000	190.5826
Maximum	1.7176	1.9103	1.4754	4.8400e-003	0.1948	0.0585	0.2533	0.0554	0.0560	0.1114	0.0000	436.6815	436.6815	0.0463	0.0000	437.8383

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2073	1.9103	1.4754	4.8400e-003	0.1948	0.0585	0.2533	0.0554	0.0560	0.1114	0.0000	436.6814	436.6814	0.0463	0.0000	437.8381
2022	1.7176	0.7296	0.7451	2.1400e-003	0.0886	0.0242	0.1127	0.0239	0.0232	0.0471	0.0000	190.1073	190.1073	0.0190	0.0000	190.5825
Maximum	1.7176	1.9103	1.4754	4.8400e-003	0.1948	0.0585	0.2533	0.0554	0.0560	0.1114	0.0000	436.6814	436.6814	0.0463	0.0000	437.8381

[illegible]

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2021	8-31-2021	1.1059	1.1059
2	9-1-2021	11-30-2021	0.7597	0.7597
3	12-1-2021	2-28-2022	0.7134	0.7134
4	3-1-2022	5-31-2022	2.0003	2.0003
		Highest	2.0003	2.0003

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7292	5.0000e-005	5.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0114
Energy	0.0445	0.4045	0.3398	2.4300e-003		0.0307	0.0307		0.0307	0.0307	0.0000	2,279.6348	2,279.6348	0.0487	0.0164	2,285.7383
Mobile	0.2936	2.4811	3.2289	0.0145	1.0836	9.9700e-003	1.0936	0.2903	9.3400e-003	0.2997	0.0000	1,345.9205	1,345.9205	0.0751	0.0000	1,347.7978
Waste						0.0000	0.0000		0.0000	0.0000	36.2380	0.0000	36.2380	2.1416	0.0000	89.7780
Water						0.0000	0.0000		0.0000	0.0000	2.9803	92.7985	95.7788	0.3081	7.6500e-003	105.7613
<b>Total</b>	<b>1.0673</b>	<b>2.8856</b>	<b>3.5741</b>	<b>0.0169</b>	<b>1.0836</b>	<b>0.0407</b>	<b>1.1244</b>	<b>0.2903</b>	<b>0.0401</b>	<b>0.3304</b>	<b>39.2183</b>	<b>3,718.3644</b>	<b>3,757.5827</b>	<b>2.5735</b>	<b>0.0241</b>	<b>3,829.0868</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7292	5.0000e-005	5.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0114
Energy	0.0445	0.4045	0.3398	2.4300e-003		0.0307	0.0307		0.0307	0.0307	0.0000	2,279.6348	2,279.6348	0.0487	0.0164	2,285.7383
Mobile	0.2936	2.4811	3.2289	0.0145	1.0836	9.9700e-003	1.0936	0.2903	9.3400e-003	0.2997	0.0000	1,345.9205	1,345.9205	0.0751	0.0000	1,347.7978
Waste						0.0000	0.0000		0.0000	0.0000	36.2380	0.0000	36.2380	2.1416	0.0000	89.7780
Water						0.0000	0.0000		0.0000	0.0000	2.9803	92.7985	95.7788	0.3081	7.6500e-003	105.7613
<b>Total</b>	<b>1.0673</b>	<b>2.8856</b>	<b>3.5741</b>	<b>0.0169</b>	<b>1.0836</b>	<b>0.0407</b>	<b>1.1244</b>	<b>0.2903</b>	<b>0.0401</b>	<b>0.3304</b>	<b>39.2183</b>	<b>3,718.3644</b>	<b>3,757.5827</b>	<b>2.5735</b>	<b>0.0241</b>	<b>3,829.0868</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2021	6/28/2021	5	20	
2	Site Preparation	Site Preparation	6/29/2021	6/30/2021	5	2	
3	Grading	Grading	7/1/2021	7/6/2021	5	4	
4	Building Construction	Building Construction	7/7/2021	4/12/2022	5	200	
5	Paving	Paving	4/13/2022	4/26/2022	5	10	
6	Architectural Coating	Architectural Coating	4/27/2022	5/10/2022	5	10	

**Acres of Grading (Site Preparation Phase): 1**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0.6**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 521,501; Non-Residential Outdoor: 173,834; Striped Parking Area: 4,332 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT



## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	6.00	59.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	6.00	4,375.00	14.70	6.90	8.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	177.00	70.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.4300e-003	0.0000	6.4300e-003	9.7000e-004	0.0000	9.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
<b>Total</b>	<b>0.0199</b>	<b>0.1970</b>	<b>0.1449</b>	<b>2.4000e-004</b>	<b>6.4300e-003</b>	<b>0.0104</b>	<b>0.0168</b>	<b>9.7000e-004</b>	<b>9.7100e-003</b>	<b>0.0107</b>	<b>0.0000</b>	<b>21.0713</b>	<b>21.0713</b>	<b>5.3900e-003</b>	<b>0.0000</b>	<b>21.2060</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	6.5500e-003	9.0000e-004	2.0000e-005	5.1000e-004	2.0000e-005	5.3000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	2.1166	2.1166	1.3000e-004	0.0000	2.1198
Vendor	1.4000e-004	5.5900e-003	1.0800e-003	2.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4638	1.4638	1.1000e-004	0.0000	1.4666
Worker	5.6000e-004	3.8000e-004	4.0900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1555	1.1555	3.0000e-005	0.0000	1.1562
<b>Total</b>	<b>8.5000e-004</b>	<b>0.0125</b>	<b>6.0700e-003</b>	<b>5.0000e-005</b>	<b>2.3200e-003</b>	<b>4.0000e-005</b>	<b>2.3600e-003</b>	<b>6.3000e-004</b>	<b>4.0000e-005</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>4.7359</b>	<b>4.7359</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>4.7426</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.4300e-003	0.0000	6.4300e-003	9.7000e-004	0.0000	9.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
<b>Total</b>	<b>0.0199</b>	<b>0.1970</b>	<b>0.1449</b>	<b>2.4000e-004</b>	<b>6.4300e-003</b>	<b>0.0104</b>	<b>0.0168</b>	<b>9.7000e-004</b>	<b>9.7100e-003</b>	<b>0.0107</b>	<b>0.0000</b>	<b>21.0713</b>	<b>21.0713</b>	<b>5.3900e-003</b>	<b>0.0000</b>	<b>21.2060</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.2 Demolition - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	6.5500e-003	9.0000e-004	2.0000e-005	5.1000e-004	2.0000e-005	5.3000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	2.1166	2.1166	1.3000e-004	0.0000	2.1198
Vendor	1.4000e-004	5.5900e-003	1.0800e-003	2.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4638	1.4638	1.1000e-004	0.0000	1.4666
Worker	5.6000e-004	3.8000e-004	4.0900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1555	1.1555	3.0000e-005	0.0000	1.1562
<b>Total</b>	<b>8.5000e-004</b>	<b>0.0125</b>	<b>6.0700e-003</b>	<b>5.0000e-005</b>	<b>2.3200e-003</b>	<b>4.0000e-005</b>	<b>2.3600e-003</b>	<b>6.3000e-004</b>	<b>4.0000e-005</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>4.7359</b>	<b>4.7359</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>4.7426</b>

**3.3 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
<b>Total</b>	<b>1.5600e-003</b>	<b>0.0174</b>	<b>7.5600e-003</b>	<b>2.0000e-005</b>	<b>5.8000e-003</b>	<b>7.7000e-004</b>	<b>6.5700e-003</b>	<b>2.9500e-003</b>	<b>7.0000e-004</b>	<b>3.6500e-003</b>	<b>0.0000</b>	<b>1.5118</b>	<b>1.5118</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.5241</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.3 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0711	0.0711	0.0000	0.0000	0.0712
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0711</b>	<b>0.0711</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0712</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
<b>Total</b>	<b>1.5600e-003</b>	<b>0.0174</b>	<b>7.5600e-003</b>	<b>2.0000e-005</b>	<b>5.8000e-003</b>	<b>7.7000e-004</b>	<b>6.5700e-003</b>	<b>2.9500e-003</b>	<b>7.0000e-004</b>	<b>3.6500e-003</b>	<b>0.0000</b>	<b>1.5118</b>	<b>1.5118</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.5241</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.3 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0711	0.0711	0.0000	0.0000	0.0712
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0711</b>	<b>0.0711</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0712</b>

**3.4 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0120	0.0000	0.0120	5.3900e-003	0.0000	5.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
<b>Total</b>	<b>2.5800e-003</b>	<b>0.0287</b>	<b>0.0127</b>	<b>3.0000e-005</b>	<b>0.0120</b>	<b>1.2800e-003</b>	<b>0.0133</b>	<b>5.3900e-003</b>	<b>1.1700e-003</b>	<b>6.5600e-003</b>	<b>0.0000</b>	<b>2.4767</b>	<b>2.4767</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.4968</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.4 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.9600e-003	0.3304	0.0407	8.3000e-004	0.0151	6.3000e-004	0.0157	4.1500e-003	6.0000e-004	4.7500e-003	0.0000	80.2006	80.2006	7.8700e-003	0.0000	80.3973
Vendor	3.0000e-005	1.1200e-003	2.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2928	0.2928	2.0000e-005	0.0000	0.2933
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1422	0.1422	0.0000	0.0000	0.1423
<b>Total</b>	<b>7.0600e-003</b>	<b>0.3316</b>	<b>0.0414</b>	<b>8.3000e-004</b>	<b>0.0154</b>	<b>6.3000e-004</b>	<b>0.0160</b>	<b>4.2200e-003</b>	<b>6.0000e-004</b>	<b>4.8200e-003</b>	<b>0.0000</b>	<b>80.6356</b>	<b>80.6356</b>	<b>7.8900e-003</b>	<b>0.0000</b>	<b>80.8330</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0120	0.0000	0.0120	5.3900e-003	0.0000	5.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
<b>Total</b>	<b>2.5800e-003</b>	<b>0.0287</b>	<b>0.0127</b>	<b>3.0000e-005</b>	<b>0.0120</b>	<b>1.2800e-003</b>	<b>0.0133</b>	<b>5.3900e-003</b>	<b>1.1700e-003</b>	<b>6.5600e-003</b>	<b>0.0000</b>	<b>2.4767</b>	<b>2.4767</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.4968</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.4 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.9600e-003	0.3304	0.0407	8.3000e-004	0.0151	6.3000e-004	0.0157	4.1500e-003	6.0000e-004	4.7500e-003	0.0000	80.2006	80.2006	7.8700e-003	0.0000	80.3973
Vendor	3.0000e-005	1.1200e-003	2.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2928	0.2928	2.0000e-005	0.0000	0.2933
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1422	0.1422	0.0000	0.0000	0.1423
<b>Total</b>	<b>7.0600e-003</b>	<b>0.3316</b>	<b>0.0414</b>	<b>8.3000e-004</b>	<b>0.0154</b>	<b>6.3000e-004</b>	<b>0.0160</b>	<b>4.2200e-003</b>	<b>6.0000e-004</b>	<b>4.8200e-003</b>	<b>0.0000</b>	<b>80.6356</b>	<b>80.6356</b>	<b>7.8900e-003</b>	<b>0.0000</b>	<b>80.8330</b>

**3.5 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1160	0.8727	0.8256	1.4100e-003		0.0438	0.0438		0.0423	0.0423	0.0000	116.1905	116.1905	0.0207	0.0000	116.7091
<b>Total</b>	<b>0.1160</b>	<b>0.8727</b>	<b>0.8256</b>	<b>1.4100e-003</b>		<b>0.0438</b>	<b>0.0438</b>		<b>0.0423</b>	<b>0.0423</b>	<b>0.0000</b>	<b>116.1905</b>	<b>116.1905</b>	<b>0.0207</b>	<b>0.0000</b>	<b>116.7091</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.5 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0107	0.4177	0.0804	1.1400e-003	0.0283	8.0000e-004	0.0291	8.1600e-003	7.6000e-004	8.9300e-003	0.0000	109.3000	109.3000	8.3400e-003	0.0000	109.5084
Worker	0.0486	0.0327	0.3566	1.1100e-003	0.1245	7.5000e-004	0.1253	0.0331	6.9000e-004	0.0338	0.0000	100.6885	100.6885	2.3500e-003	0.0000	100.7472
<b>Total</b>	<b>0.0593</b>	<b>0.4505</b>	<b>0.4370</b>	<b>2.2500e-003</b>	<b>0.1528</b>	<b>1.5500e-003</b>	<b>0.1544</b>	<b>0.0412</b>	<b>1.4500e-003</b>	<b>0.0427</b>	<b>0.0000</b>	<b>209.9885</b>	<b>209.9885</b>	<b>0.0107</b>	<b>0.0000</b>	<b>210.2556</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1160	0.8727	0.8256	1.4100e-003		0.0438	0.0438		0.0423	0.0423	0.0000	116.1903	116.1903	0.0207	0.0000	116.7089
<b>Total</b>	<b>0.1160</b>	<b>0.8727</b>	<b>0.8256</b>	<b>1.4100e-003</b>		<b>0.0438</b>	<b>0.0438</b>		<b>0.0423</b>	<b>0.0423</b>	<b>0.0000</b>	<b>116.1903</b>	<b>116.1903</b>	<b>0.0207</b>	<b>0.0000</b>	<b>116.7089</b>



## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.5 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0107	0.4177	0.0804	1.1400e-003	0.0283	8.0000e-004	0.0291	8.1600e-003	7.6000e-004	8.9300e-003	0.0000	109.3000	109.3000	8.3400e-003	0.0000	109.5084
Worker	0.0486	0.0327	0.3566	1.1100e-003	0.1245	7.5000e-004	0.1253	0.0331	6.9000e-004	0.0338	0.0000	100.6885	100.6885	2.3500e-003	0.0000	100.7472
<b>Total</b>	<b>0.0593</b>	<b>0.4505</b>	<b>0.4370</b>	<b>2.2500e-003</b>	<b>0.1528</b>	<b>1.5500e-003</b>	<b>0.1544</b>	<b>0.0412</b>	<b>1.4500e-003</b>	<b>0.0427</b>	<b>0.0000</b>	<b>209.9885</b>	<b>209.9885</b>	<b>0.0107</b>	<b>0.0000</b>	<b>210.2556</b>

**3.5 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0594	0.4501	0.4582	7.9000e-004		0.0212	0.0212		0.0205	0.0205	0.0000	65.3677	65.3677	0.0114	0.0000	65.6523
<b>Total</b>	<b>0.0594</b>	<b>0.4501</b>	<b>0.4582</b>	<b>7.9000e-004</b>		<b>0.0212</b>	<b>0.0212</b>		<b>0.0205</b>	<b>0.0205</b>	<b>0.0000</b>	<b>65.3677</b>	<b>65.3677</b>	<b>0.0114</b>	<b>0.0000</b>	<b>65.6523</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.5 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6100e-003	0.2214	0.0421	6.4000e-004	0.0159	3.8000e-004	0.0163	4.5900e-003	3.6000e-004	4.9500e-003	0.0000	60.9524	60.9524	4.4400e-003	0.0000	61.0635
Worker	0.0256	0.0166	0.1848	6.0000e-004	0.0700	4.1000e-004	0.0705	0.0186	3.8000e-004	0.0190	0.0000	54.5705	54.5705	1.1900e-003	0.0000	54.6002
<b>Total</b>	<b>0.0312</b>	<b>0.2379</b>	<b>0.2269</b>	<b>1.2400e-003</b>	<b>0.0860</b>	<b>7.9000e-004</b>	<b>0.0867</b>	<b>0.0232</b>	<b>7.4000e-004</b>	<b>0.0239</b>	<b>0.0000</b>	<b>115.5229</b>	<b>115.5229</b>	<b>5.6300e-003</b>	<b>0.0000</b>	<b>115.6636</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0594	0.4501	0.4582	7.9000e-004		0.0212	0.0212		0.0205	0.0205	0.0000	65.3676	65.3676	0.0114	0.0000	65.6522
<b>Total</b>	<b>0.0594</b>	<b>0.4501</b>	<b>0.4582</b>	<b>7.9000e-004</b>		<b>0.0212</b>	<b>0.0212</b>		<b>0.0205</b>	<b>0.0205</b>	<b>0.0000</b>	<b>65.3676</b>	<b>65.3676</b>	<b>0.0114</b>	<b>0.0000</b>	<b>65.6522</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.5 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6100e-003	0.2214	0.0421	6.4000e-004	0.0159	3.8000e-004	0.0163	4.5900e-003	3.6000e-004	4.9500e-003	0.0000	60.9524	60.9524	4.4400e-003	0.0000	61.0635
Worker	0.0256	0.0166	0.1848	6.0000e-004	0.0700	4.1000e-004	0.0705	0.0186	3.8000e-004	0.0190	0.0000	54.5705	54.5705	1.1900e-003	0.0000	54.6002
<b>Total</b>	<b>0.0312</b>	<b>0.2379</b>	<b>0.2269</b>	<b>1.2400e-003</b>	<b>0.0860</b>	<b>7.9000e-004</b>	<b>0.0867</b>	<b>0.0232</b>	<b>7.4000e-004</b>	<b>0.0239</b>	<b>0.0000</b>	<b>115.5229</b>	<b>115.5229</b>	<b>5.6300e-003</b>	<b>0.0000</b>	<b>115.6636</b>

**3.6 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9315
Paving	1.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.5700e-003</b>	<b>0.0339</b>	<b>0.0440</b>	<b>7.0000e-005</b>		<b>1.7400e-003</b>	<b>1.7400e-003</b>		<b>1.6000e-003</b>	<b>1.6000e-003</b>	<b>0.0000</b>	<b>5.8848</b>	<b>5.8848</b>	<b>1.8700e-003</b>	<b>0.0000</b>	<b>5.9315</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.6 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.8800e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5567	0.5567	1.0000e-005	0.0000	0.5570
<b>Total</b>	<b>2.6000e-004</b>	<b>1.7000e-004</b>	<b>1.8800e-003</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5567</b>	<b>0.5567</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.5570</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9314
Paving	1.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.5700e-003</b>	<b>0.0339</b>	<b>0.0440</b>	<b>7.0000e-005</b>		<b>1.7400e-003</b>	<b>1.7400e-003</b>		<b>1.6000e-003</b>	<b>1.6000e-003</b>	<b>0.0000</b>	<b>5.8848</b>	<b>5.8848</b>	<b>1.8700e-003</b>	<b>0.0000</b>	<b>5.9314</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.6 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.8800e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5567	0.5567	1.0000e-005	0.0000	0.5570
<b>Total</b>	<b>2.6000e-004</b>	<b>1.7000e-004</b>	<b>1.8800e-003</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5567</b>	<b>0.5567</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.5570</b>

**3.7 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
<b>Total</b>	<b>1.6225</b>	<b>7.0400e-003</b>	<b>9.0700e-003</b>	<b>1.0000e-005</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.2787</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.7 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.5000e-004	5.0700e-003	2.0000e-005	1.9200e-003	1.0000e-005	1.9300e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.4987	1.4987	3.0000e-005	0.0000	1.4995
<b>Total</b>	<b>7.0000e-004</b>	<b>4.5000e-004</b>	<b>5.0700e-003</b>	<b>2.0000e-005</b>	<b>1.9200e-003</b>	<b>1.0000e-005</b>	<b>1.9300e-003</b>	<b>5.1000e-004</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>1.4987</b>	<b>1.4987</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.4995</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
<b>Total</b>	<b>1.6225</b>	<b>7.0400e-003</b>	<b>9.0700e-003</b>	<b>1.0000e-005</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.2787</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**3.7 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.5000e-004	5.0700e-003	2.0000e-005	1.9200e-003	1.0000e-005	1.9300e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.4987	1.4987	3.0000e-005	0.0000	1.4995
<b>Total</b>	<b>7.0000e-004</b>	<b>4.5000e-004</b>	<b>5.0700e-003</b>	<b>2.0000e-005</b>	<b>1.9200e-003</b>	<b>1.0000e-005</b>	<b>1.9300e-003</b>	<b>5.1000e-004</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>1.4987</b>	<b>1.4987</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.4995</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2936	2.4811	3.2289	0.0145	1.0836	9.9700e-003	1.0936	0.2903	9.3400e-003	0.2997	0.0000	1,345.9205	1,345.9205	0.0751	0.0000	1,347.7978
Unmitigated	0.2936	2.4811	3.2289	0.0145	1.0836	9.9700e-003	1.0936	0.2903	9.3400e-003	0.2997	0.0000	1,345.9205	1,345.9205	0.0751	0.0000	1,347.7978

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	208.10	208.10	208.10	670,399	670,399
Health Club	0.00	0.00	0.00		
Hotel	908.52	908.52	908.52	2,167,884	2,167,884
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,116.62	1,116.62	1,116.62	2,838,283	2,838,283

## 4.3 Trip Type Information



## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
General Office Building	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Health Club	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Hotel	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Recreational Swimming Pool	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,839.2768	1,839.2768	0.0402	8.3200e-003	1,842.7635
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,839.2768	1,839.2768	0.0402	8.3200e-003	1,842.7635
NaturalGas Mitigated	0.0445	0.4045	0.3398	2.4300e-003		0.0307	0.0307		0.0307	0.0307	0.0000	440.3580	440.3580	8.4400e-003	8.0700e-003	442.9748
NaturalGas Unmitigated	0.0445	0.4045	0.3398	2.4300e-003		0.0307	0.0307		0.0307	0.0307	0.0000	440.3580	440.3580	8.4400e-003	8.0700e-003	442.9748

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	63900.1	3.4000e-004	3.1300e-003	2.6300e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4100	3.4100	7.0000e-005	6.0000e-005	3.4302
Health Club	35739	1.9000e-004	1.7500e-003	1.4700e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9072	1.9072	4.0000e-005	3.0000e-005	1.9185
Hotel	8.15236e+006	0.0440	0.3996	0.3357	2.4000e-003		0.0304	0.0304		0.0304	0.0304	0.0000	435.0409	435.0409	8.3400e-003	7.9800e-003	437.6261
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0445</b>	<b>0.4045</b>	<b>0.3398</b>	<b>2.4300e-003</b>		<b>0.0307</b>	<b>0.0307</b>		<b>0.0307</b>	<b>0.0307</b>	<b>0.0000</b>	<b>440.3580</b>	<b>440.3580</b>	<b>8.4500e-003</b>	<b>8.0700e-003</b>	<b>442.9748</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

## 5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	63900.1	3.4000e-004	3.1300e-003	2.6300e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4100	3.4100	7.0000e-005	6.0000e-005	3.4302
Health Club	35739	1.9000e-004	1.7500e-003	1.4700e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9072	1.9072	4.0000e-005	3.0000e-005	1.9185
Hotel	8.15236e+006	0.0440	0.3996	0.3357	2.4000e-003		0.0304	0.0304		0.0304	0.0304	0.0000	435.0409	435.0409	8.3400e-003	7.9800e-003	437.6261
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0445</b>	<b>0.4045</b>	<b>0.3398</b>	<b>2.4300e-003</b>		<b>0.0307</b>	<b>0.0307</b>		<b>0.0307</b>	<b>0.0307</b>	<b>0.0000</b>	<b>440.3580</b>	<b>440.3580</b>	<b>8.4500e-003</b>	<b>8.0700e-003</b>	<b>442.9748</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	404340	243.1316	5.3200e-003	1.1000e-003	243.5925
General Office Building	175311	105.4152	2.3100e-003	4.8000e-004	105.6151
Health Club	11165	6.7136	1.5000e-004	3.0000e-005	6.7263
Hotel	2.46432e+006	1,481.8067	0.0324	6.7100e-003	1,484.6157
Parking Lot	3675	2.2098	5.0000e-005	1.0000e-005	2.2140
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1,839.2768</b>	<b>0.0403</b>	<b>8.3300e-003</b>	<b>1,842.7635</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	404340	243.1316	5.3200e-003	1.1000e-003	243.5925
General Office Building	175311	105.4152	2.3100e-003	4.8000e-004	105.6151
Health Club	11165	6.7136	1.5000e-004	3.0000e-005	6.7263
Hotel	2.46432e+006	1,481.8067	0.0324	6.7100e-003	1,484.6157
Parking Lot	3675	2.2098	5.0000e-005	1.0000e-005	2.2140
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1,839.2768</b>	<b>0.0403</b>	<b>8.3300e-003</b>	<b>1,842.7635</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7292	5.0000e-005	5.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0114
Unmitigated	0.7292	5.0000e-005	5.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0114

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5666					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0114
<b>Total</b>	<b>0.7292</b>	<b>5.0000e-005</b>	<b>5.5000e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0107</b>	<b>0.0107</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0114</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5666					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0114
<b>Total</b>	<b>0.7292</b>	<b>5.0000e-005</b>	<b>5.5000e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0107</b>	<b>0.0107</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0114</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**



## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	95.7788	0.3081	7.6500e-003	105.7613
Unmitigated	95.7788	0.3081	7.6500e-003	105.7613

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	3.2703 / 2.00438	40.0329	0.1074	2.6900e-003	43.5207
Health Club	0.0650575 / 0.0398739	0.7964	2.1400e-003	5.0000e-005	0.8658
Hotel	5.73289 / 0.636988	50.9604	0.1879	4.6300e-003	57.0381
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.325879 / 0.199732	3.9892	0.0107	2.7000e-004	4.3368
<b>Total</b>		<b>95.7788</b>	<b>0.3081</b>	<b>7.6400e-003</b>	<b>105.7613</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	3.2703 / 2.00438	40.0329	0.1074	2.6900e-003	43.5207
Health Club	0.0650575 / 0.0398739	0.7964	2.1400e-003	5.0000e-005	0.8658
Hotel	5.73289 / 0.636988	50.9604	0.1879	4.6300e-003	57.0381
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.325879 / 0.199732	3.9892	0.0107	2.7000e-004	4.3368
<b>Total</b>		<b>95.7788</b>	<b>0.3081</b>	<b>7.6400e-003</b>	<b>105.7613</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	36.2380	2.1416	0.0000	89.7780
Unmitigated	36.2380	2.1416	0.0000	89.7780

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	17.11	3.4732	0.2053	0.0000	8.6046
Health Club	6.27	1.2728	0.0752	0.0000	3.1532
Hotel	123.73	25.1161	1.4843	0.0000	62.2240
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	31.41	6.3760	0.3768	0.0000	15.7961
<b>Total</b>		<b>36.2380</b>	<b>2.1416</b>	<b>0.0000</b>	<b>89.7780</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	17.11	3.4732	0.2053	0.0000	8.6046
Health Club	6.27	1.2728	0.0752	0.0000	3.1532
Hotel	123.73	25.1161	1.4843	0.0000	62.2240
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	31.41	6.3760	0.3768	0.0000	15.7961
<b>Total</b>		<b>36.2380</b>	<b>2.1416</b>	<b>0.0000</b>	<b>89.7780</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

---

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

## Dual Brand Marriot Hotel

### Riverside-South Coast County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	18.40	1000sqft	0.10	18,415.00	0
Enclosed Parking with Elevator	171.00	Space	0.50	69,000.00	0
Parking Lot	8.00	Space	0.10	10,500.00	0
Health Club	1.10	1000sqft	0.03	1,100.00	0
Hotel	226.00	Room	0.25	135,850.00	0
Recreational Swimming Pool	5.51	1000sqft	0.13	5,510.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data



Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

Project Characteristics - Consistent with the Staff Report's model.

Land Use - See SWAPE comment regarding underestimated land use size and the failure to model all proposed land uses.

Construction Phase - See SWAPE comment regarding the individual construction phase lengths.

Trips and VMT - Consistent with the Staff Report's model.

Demolition - Consistent with the Staff Report's model.

Grading - Consistent with the Staff Report's model.

Vehicle Trips - Consistent with the Staff Report's model.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation.

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	35,000.00
tblLandUse	LandUseSquareFeet	18,400.00	18,415.00
tblLandUse	LandUseSquareFeet	68,400.00	69,000.00
tblLandUse	LandUseSquareFeet	3,200.00	10,500.00
tblLandUse	LandUseSquareFeet	328,152.00	135,850.00
tblLandUse	LotAcreage	0.42	0.10
tblLandUse	LotAcreage	1.54	0.50
tblLandUse	LotAcreage	0.07	0.10
tblLandUse	LotAcreage	7.53	0.25
tblTripsAndVMT	HaulingTripLength	20.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	ST_TR	2.46	11.31
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	8.19	4.02
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	1.05	11.31
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	5.95	4.02
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	11.03	11.31
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.17	4.02
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

---

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7035	179.1859	24.7663	0.4419	13.8170	1.0448	14.7666	4.8310	0.9751	5.7161	0.0000	46,739.7794	46,739.7794	4.5870	0.0000	46,854.4546
2022	324.6554	19.0448	19.8373	0.0583	2.4267	0.6106	3.0372	0.6537	0.5892	1.2429	0.0000	5,713.7666	5,713.7666	0.5186	0.0000	5,726.7308
Maximum	324.6554	179.1859	24.7663	0.4419	13.8170	1.0448	14.7666	4.8310	0.9751	5.7161	0.0000	46,739.7794	46,739.7794	4.5870	0.0000	46,854.4546

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7035	179.1859	24.7663	0.4419	13.8170	1.0448	14.7666	4.8310	0.9751	5.7161	0.0000	46,739.7794	46,739.7794	4.5870	0.0000	46,854.4546
2022	324.6554	19.0448	19.8373	0.0583	2.4267	0.6106	3.0372	0.6537	0.5892	1.2429	0.0000	5,713.7666	5,713.7666	0.5186	0.0000	5,726.7308
Maximum	324.6554	179.1859	24.7663	0.4419	13.8170	1.0448	14.7666	4.8310	0.9751	5.7161	0.0000	46,739.7794	46,739.7794	4.5870	0.0000	46,854.4546

[illegible]

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
Energy	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955
Mobile	1.9188	13.4730	19.6398	0.0844	6.0528	0.0546	6.1074	1.6194	0.0511	1.6705		8,625.9205	8,625.9205	0.4497		8,637.1632
<b>Total</b>	<b>6.1596</b>	<b>15.6899</b>	<b>21.5456</b>	<b>0.0977</b>	<b>6.0528</b>	<b>0.2232</b>	<b>6.2760</b>	<b>1.6194</b>	<b>0.2197</b>	<b>1.8391</b>		<b>11,285.8043</b>	<b>11,285.8043</b>	<b>0.5009</b>	<b>0.0488</b>	<b>11,312.8591</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
Energy	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955
Mobile	1.9188	13.4730	19.6398	0.0844	6.0528	0.0546	6.1074	1.6194	0.0511	1.6705		8,625.9205	8,625.9205	0.4497		8,637.1632
<b>Total</b>	<b>6.1596</b>	<b>15.6899</b>	<b>21.5456</b>	<b>0.0977</b>	<b>6.0528</b>	<b>0.2232</b>	<b>6.2760</b>	<b>1.6194</b>	<b>0.2197</b>	<b>1.8391</b>		<b>11,285.8043</b>	<b>11,285.8043</b>	<b>0.5009</b>	<b>0.0488</b>	<b>11,312.8591</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2021	6/28/2021	5	20	
2	Site Preparation	Site Preparation	6/29/2021	6/30/2021	5	2	
3	Grading	Grading	7/1/2021	7/6/2021	5	4	
4	Building Construction	Building Construction	7/7/2021	4/12/2022	5	200	
5	Paving	Paving	4/13/2022	4/26/2022	5	10	
6	Architectural Coating	Architectural Coating	4/27/2022	5/10/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 521,501; Non-Residential Outdoor: 173,834; Striped Parking Area: 4,332 (Architectural Coating – sqft)

#### OffRoad Equipment

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	6.00	59.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	6.00	4,375.00	14.70	6.90	8.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	177.00	70.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6427	0.0000	0.6427	0.0973	0.0000	0.0973			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.717 1	2,322.717 1	0.5940		2,337.565 8
<b>Total</b>	<b>1.9930</b>	<b>19.6966</b>	<b>14.4925</b>	<b>0.0241</b>	<b>0.6427</b>	<b>1.0409</b>	<b>1.6836</b>	<b>0.0973</b>	<b>0.9715</b>	<b>1.0688</b>		<b>2,322.717 1</b>	<b>2,322.717 1</b>	<b>0.5940</b>		<b>2,337.565 8</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0144	0.6412	0.0843	2.2200e-003	0.0516	1.9500e-003	0.0536	0.0142	1.8700e-003	0.0160		235.8038	235.8038	0.0137		236.1462
Vendor	0.0140	0.5552	0.0991	1.5500e-003	0.0384	1.0600e-003	0.0395	0.0111	1.0100e-003	0.0121		163.9506	163.9506	0.0117		164.2438
Worker	0.0616	0.0351	0.4806	1.3900e-003	0.1453	8.6000e-004	0.1462	0.0385	7.9000e-004	0.0393		138.4176	138.4176	3.3000e-003		138.5001
<b>Total</b>	<b>0.0900</b>	<b>1.2315</b>	<b>0.6640</b>	<b>5.1600e-003</b>	<b>0.2353</b>	<b>3.8700e-003</b>	<b>0.2392</b>	<b>0.0638</b>	<b>3.6700e-003</b>	<b>0.0674</b>		<b>538.1721</b>	<b>538.1721</b>	<b>0.0287</b>		<b>538.8902</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6427	0.0000	0.6427	0.0973	0.0000	0.0973			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.717 1	2,322.717 1	0.5940		2,337.565 8
<b>Total</b>	<b>1.9930</b>	<b>19.6966</b>	<b>14.4925</b>	<b>0.0241</b>	<b>0.6427</b>	<b>1.0409</b>	<b>1.6836</b>	<b>0.0973</b>	<b>0.9715</b>	<b>1.0688</b>	<b>0.0000</b>	<b>2,322.717 1</b>	<b>2,322.717 1</b>	<b>0.5940</b>		<b>2,337.565 8</b>



## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.2 Demolition - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0144	0.6412	0.0843	2.2200e-003	0.0516	1.9500e-003	0.0536	0.0142	1.8700e-003	0.0160		235.8038	235.8038	0.0137		236.1462
Vendor	0.0140	0.5552	0.0991	1.5500e-003	0.0384	1.0600e-003	0.0395	0.0111	1.0100e-003	0.0121		163.9506	163.9506	0.0117		164.2438
Worker	0.0616	0.0351	0.4806	1.3900e-003	0.1453	8.6000e-004	0.1462	0.0385	7.9000e-004	0.0393		138.4176	138.4176	3.3000e-003		138.5001
<b>Total</b>	<b>0.0900</b>	<b>1.2315</b>	<b>0.6640</b>	<b>5.1600e-003</b>	<b>0.2353</b>	<b>3.8700e-003</b>	<b>0.2392</b>	<b>0.0638</b>	<b>3.6700e-003</b>	<b>0.0674</b>		<b>538.1721</b>	<b>538.1721</b>	<b>0.0287</b>		<b>538.8902</b>

**3.3 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041		1,666.5174	1,666.5174	0.5390		1,679.9920
<b>Total</b>	<b>1.5558</b>	<b>17.4203</b>	<b>7.5605</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.7654</b>	<b>6.5650</b>	<b>2.9537</b>	<b>0.7041</b>	<b>3.6578</b>		<b>1,666.5174</b>	<b>1,666.5174</b>	<b>0.5390</b>		<b>1,679.9920</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.3 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0379	0.0216	0.2958	8.5000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		85.1801	85.1801	2.0300e-003		85.2309
<b>Total</b>	<b>0.0379</b>	<b>0.0216</b>	<b>0.2958</b>	<b>8.5000e-004</b>	<b>0.0894</b>	<b>5.3000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>4.9000e-004</b>	<b>0.0242</b>		<b>85.1801</b>	<b>85.1801</b>	<b>2.0300e-003</b>		<b>85.2309</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920
<b>Total</b>	<b>1.5558</b>	<b>17.4203</b>	<b>7.5605</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.7654</b>	<b>6.5650</b>	<b>2.9537</b>	<b>0.7041</b>	<b>3.6578</b>	<b>0.0000</b>	<b>1,666.5174</b>	<b>1,666.5174</b>	<b>0.5390</b>		<b>1,679.9920</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.3 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0379	0.0216	0.2958	8.5000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		85.1801	85.1801	2.0300e-003		85.2309
<b>Total</b>	<b>0.0379</b>	<b>0.0216</b>	<b>0.2958</b>	<b>8.5000e-004</b>	<b>0.0894</b>	<b>5.3000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>4.9000e-004</b>	<b>0.0242</b>		<b>85.1801</b>	<b>85.1801</b>	<b>2.0300e-003</b>		<b>85.2309</b>

**3.4 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0223	0.0000	6.0223	2.6934	0.0000	2.6934			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
<b>Total</b>	<b>1.2884</b>	<b>14.3307</b>	<b>6.3314</b>	<b>0.0141</b>	<b>6.0223</b>	<b>0.6379</b>	<b>6.6602</b>	<b>2.6934</b>	<b>0.5869</b>	<b>3.2803</b>		<b>1,365.0648</b>	<b>1,365.0648</b>	<b>0.4415</b>		<b>1,376.1020</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.4 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.3632	164.2783	18.0400	0.4255	7.6668	0.3101	7.9769	2.1029	0.2967	2.3996		45,125.58 39	45,125.58 39	4.1318		45,228.87 79
Vendor	0.0140	0.5552	0.0991	1.5500e-003	0.0384	1.0600e-003	0.0395	0.0111	1.0100e-003	0.0121		163.9506	163.9506	0.0117		164.2438
Worker	0.0379	0.0216	0.2958	8.5000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		85.1801	85.1801	2.0300e-003		85.2309
<b>Total</b>	<b>3.4151</b>	<b>164.8552</b>	<b>18.4349</b>	<b>0.4279</b>	<b>7.7947</b>	<b>0.3117</b>	<b>8.1064</b>	<b>2.1376</b>	<b>0.2982</b>	<b>2.4358</b>		<b>45,374.71 46</b>	<b>45,374.71 46</b>	<b>4.1455</b>		<b>45,478.35 26</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0223	0.0000	6.0223	2.6934	0.0000	2.6934			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.064 8	1,365.064 8	0.4415		1,376.102 0
<b>Total</b>	<b>1.2884</b>	<b>14.3307</b>	<b>6.3314</b>	<b>0.0141</b>	<b>6.0223</b>	<b>0.6379</b>	<b>6.6602</b>	<b>2.6934</b>	<b>0.5869</b>	<b>3.2803</b>	<b>0.0000</b>	<b>1,365.064 8</b>	<b>1,365.064 8</b>	<b>0.4415</b>		<b>1,376.102 0</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.4 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.3632	164.2783	18.0400	0.4255	7.6668	0.3101	7.9769	2.1029	0.2967	2.3996		45,125.5839	45,125.5839	4.1318		45,228.8779
Vendor	0.0140	0.5552	0.0991	1.5500e-003	0.0384	1.0600e-003	0.0395	0.0111	1.0100e-003	0.0121		163.9506	163.9506	0.0117		164.2438
Worker	0.0379	0.0216	0.2958	8.5000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		85.1801	85.1801	2.0300e-003		85.2309
<b>Total</b>	<b>3.4151</b>	<b>164.8552</b>	<b>18.4349</b>	<b>0.4279</b>	<b>7.7947</b>	<b>0.3117</b>	<b>8.1064</b>	<b>2.1376</b>	<b>0.2982</b>	<b>2.4358</b>		<b>45,374.7146</b>	<b>45,374.7146</b>	<b>4.1455</b>		<b>45,478.3526</b>

**3.5 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>		<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.5 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1634	6.4777	1.1557	0.0181	0.4482	0.0123	0.4606	0.1291	0.0118	0.1408		1,912.757 2	1,912.757 2	0.1368		1,916.178 1
Worker	0.8392	0.4781	6.5439	0.0189	1.9784	0.0117	1.9901	0.5247	0.0107	0.5354		1,884.609 1	1,884.609 1	0.0449		1,885.732 5
<b>Total</b>	<b>1.0026</b>	<b>6.9558</b>	<b>7.6996</b>	<b>0.0371</b>	<b>2.4267</b>	<b>0.0240</b>	<b>2.4507</b>	<b>0.6537</b>	<b>0.0225</b>	<b>0.6763</b>		<b>3,797.366 3</b>	<b>3,797.366 3</b>	<b>0.1818</b>		<b>3,801.910 7</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.220 0	2,001.220 0	0.3573		2,010.151 7
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>	<b>0.0000</b>	<b>2,001.220 0</b>	<b>2,001.220 0</b>	<b>0.3573</b>		<b>2,010.151 7</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.5 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1634	6.4777	1.1557	0.0181	0.4482	0.0123	0.4606	0.1291	0.0118	0.1408		1,912.757 2	1,912.757 2	0.1368		1,916.178 1
Worker	0.8392	0.4781	6.5439	0.0189	1.9784	0.0117	1.9901	0.5247	0.0107	0.5354		1,884.609 1	1,884.609 1	0.0449		1,885.732 5
<b>Total</b>	<b>1.0026</b>	<b>6.9558</b>	<b>7.6996</b>	<b>0.0371</b>	<b>2.4267</b>	<b>0.0240</b>	<b>2.4507</b>	<b>0.6537</b>	<b>0.0225</b>	<b>0.6763</b>		<b>3,797.366 3</b>	<b>3,797.366 3</b>	<b>0.1818</b>		<b>3,801.910 7</b>

**3.5 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.542 9	2,001.542 9	0.3486		2,010.258 1
<b>Total</b>	<b>1.6487</b>	<b>12.5031</b>	<b>12.7264</b>	<b>0.0221</b>		<b>0.5889</b>	<b>0.5889</b>		<b>0.5689</b>	<b>0.5689</b>		<b>2,001.542 9</b>	<b>2,001.542 9</b>	<b>0.3486</b>		<b>2,010.258 1</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.5 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1524	6.1116	1.0750	0.0180	0.4482	0.0104	0.4586	0.1291	9.9100e-003	0.1390		1,896.4763	1,896.4763	0.1296		1,899.7162
Worker	0.7849	0.4302	6.0359	0.0182	1.9784	0.0114	1.9898	0.5247	0.0105	0.5351		1,815.7475	1,815.7475	0.0404		1,816.7566
<b>Total</b>	<b>0.9373</b>	<b>6.5418</b>	<b>7.1109</b>	<b>0.0362</b>	<b>2.4267</b>	<b>0.0217</b>	<b>2.4484</b>	<b>0.6537</b>	<b>0.0204</b>	<b>0.6741</b>		<b>3,712.2237</b>	<b>3,712.2237</b>	<b>0.1700</b>		<b>3,716.4728</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
<b>Total</b>	<b>1.6487</b>	<b>12.5031</b>	<b>12.7264</b>	<b>0.0221</b>		<b>0.5889</b>	<b>0.5889</b>		<b>0.5689</b>	<b>0.5689</b>	<b>0.0000</b>	<b>2,001.5429</b>	<b>2,001.5429</b>	<b>0.3486</b>		<b>2,010.2581</b>



## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.5 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1524	6.1116	1.0750	0.0180	0.4482	0.0104	0.4586	0.1291	9.9100e-003	0.1390		1,896.4763	1,896.4763	0.1296		1,899.7162
Worker	0.7849	0.4302	6.0359	0.0182	1.9784	0.0114	1.9898	0.5247	0.0105	0.5351		1,815.7475	1,815.7475	0.0404		1,816.7566
<b>Total</b>	<b>0.9373</b>	<b>6.5418</b>	<b>7.1109</b>	<b>0.0362</b>	<b>2.4267</b>	<b>0.0217</b>	<b>2.4484</b>	<b>0.6537</b>	<b>0.0204</b>	<b>0.6741</b>		<b>3,712.2237</b>	<b>3,712.2237</b>	<b>0.1700</b>		<b>3,716.4728</b>

**3.6 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7139</b>	<b>6.7738</b>	<b>8.8060</b>	<b>0.0135</b>		<b>0.3474</b>	<b>0.3474</b>		<b>0.3205</b>	<b>0.3205</b>		<b>1,297.3789</b>	<b>1,297.3789</b>	<b>0.4113</b>		<b>1,307.6608</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.6 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0577	0.0316	0.4433	1.3400e-003	0.1453	8.3000e-004	0.1461	0.0385	7.7000e-004	0.0393		133.3600	133.3600	2.9600e-003		133.4341
<b>Total</b>	<b>0.0577</b>	<b>0.0316</b>	<b>0.4433</b>	<b>1.3400e-003</b>	<b>0.1453</b>	<b>8.3000e-004</b>	<b>0.1461</b>	<b>0.0385</b>	<b>7.7000e-004</b>	<b>0.0393</b>		<b>133.3600</b>	<b>133.3600</b>	<b>2.9600e-003</b>		<b>133.4341</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7139</b>	<b>6.7738</b>	<b>8.8060</b>	<b>0.0135</b>		<b>0.3474</b>	<b>0.3474</b>		<b>0.3205</b>	<b>0.3205</b>	<b>0.0000</b>	<b>1,297.3789</b>	<b>1,297.3789</b>	<b>0.4113</b>		<b>1,307.6608</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.6 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0577	0.0316	0.4433	1.3400e-003	0.1453	8.3000e-004	0.1461	0.0385	7.7000e-004	0.0393		133.3600	133.3600	2.9600e-003		133.4341
<b>Total</b>	<b>0.0577</b>	<b>0.0316</b>	<b>0.4433</b>	<b>1.3400e-003</b>	<b>0.1453</b>	<b>8.3000e-004</b>	<b>0.1461</b>	<b>0.0385</b>	<b>7.7000e-004</b>	<b>0.0393</b>		<b>133.3600</b>	<b>133.3600</b>	<b>2.9600e-003</b>		<b>133.4341</b>

**3.7 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	324.2957					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>324.5002</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.7 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		359.0461	359.0461	7.9800e-003		359.2457
<b>Total</b>	<b>0.1552</b>	<b>0.0851</b>	<b>1.1935</b>	<b>3.6000e-003</b>	<b>0.3912</b>	<b>2.2400e-003</b>	<b>0.3935</b>	<b>0.1038</b>	<b>2.0700e-003</b>	<b>0.1058</b>		<b>359.0461</b>	<b>359.0461</b>	<b>7.9800e-003</b>		<b>359.2457</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	324.2957					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>324.5002</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**3.7 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		359.0461	359.0461	7.9800e-003		359.2457
<b>Total</b>	<b>0.1552</b>	<b>0.0851</b>	<b>1.1935</b>	<b>3.6000e-003</b>	<b>0.3912</b>	<b>2.2400e-003</b>	<b>0.3935</b>	<b>0.1038</b>	<b>2.0700e-003</b>	<b>0.1058</b>		<b>359.0461</b>	<b>359.0461</b>	<b>7.9800e-003</b>		<b>359.2457</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9188	13.4730	19.6398	0.0844	6.0528	0.0546	6.1074	1.6194	0.0511	1.6705		8,625.9205	8,625.9205	0.4497		8,637.1632
Unmitigated	1.9188	13.4730	19.6398	0.0844	6.0528	0.0546	6.1074	1.6194	0.0511	1.6705		8,625.9205	8,625.9205	0.4497		8,637.1632

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	208.10	208.10	208.10	670,399	670,399
Health Club	0.00	0.00	0.00		
Hotel	908.52	908.52	908.52	2,167,884	2,167,884
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,116.62	1,116.62	1,116.62	2,838,283	2,838,283

## 4.3 Trip Type Information

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
General Office Building	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Health Club	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Hotel	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Recreational Swimming Pool	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955
NaturalGas Unmitigated	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955



## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	175.069	1.8900e-003	0.0172	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003		20.5963	20.5963	3.9000e-004	3.8000e-004	20.7187
Health Club	97.9151	1.0600e-003	9.6000e-003	8.0600e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5194	11.5194	2.2000e-004	2.1000e-004	11.5879
Hotel	22335.2	0.2409	2.1897	1.8394	0.0131		0.1664	0.1664		0.1664	0.1664		2,627.6740	2,627.6740	0.0504	0.0482	2,643.2889
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.2438</b>	<b>2.2165</b>	<b>1.8619</b>	<b>0.0133</b>		<b>0.1685</b>	<b>0.1685</b>		<b>0.1685</b>	<b>0.1685</b>		<b>2,659.7897</b>	<b>2,659.7897</b>	<b>0.0510</b>	<b>0.0488</b>	<b>2,675.5955</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.175069	1.8900e-003	0.0172	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003		20.5963	20.5963	3.9000e-004	3.8000e-004	20.7187
Health Club	0.0979151	1.0600e-003	9.6000e-003	8.0600e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5194	11.5194	2.2000e-004	2.1000e-004	11.5879
Hotel	22.3352	0.2409	2.1897	1.8394	0.0131		0.1664	0.1664		0.1664	0.1664		2,627.6740	2,627.6740	0.0504	0.0482	2,643.2889
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.2438</b>	<b>2.2165</b>	<b>1.8619</b>	<b>0.0133</b>		<b>0.1685</b>	<b>0.1685</b>		<b>0.1685</b>	<b>0.1685</b>		<b>2,659.7897</b>	<b>2,659.7897</b>	<b>0.0510</b>	<b>0.0488</b>	<b>2,675.5955</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
Unmitigated	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8885					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0900e-003	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
<b>Total</b>	<b>3.9970</b>	<b>4.0000e-004</b>	<b>0.0440</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0941</b>	<b>0.0941</b>	<b>2.5000e-004</b>		<b>0.1003</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8885					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0900e-003	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
<b>Total</b>	<b>3.9970</b>	<b>4.0000e-004</b>	<b>0.0440</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0941</b>	<b>0.0941</b>	<b>2.5000e-004</b>		<b>0.1003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

---

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

## Dual Brand Marriot Hotel

### Riverside-South Coast County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	18.40	1000sqft	0.10	18,415.00	0
Enclosed Parking with Elevator	171.00	Space	0.50	69,000.00	0
Parking Lot	8.00	Space	0.10	10,500.00	0
Health Club	1.10	1000sqft	0.03	1,100.00	0
Hotel	226.00	Room	0.25	135,850.00	0
Recreational Swimming Pool	5.51	1000sqft	0.13	5,510.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

Project Characteristics - Consistent with the Staff Report's model.

Land Use - See SWAPE comment regarding underestimated land use size and the failure to model all proposed land uses.

Construction Phase - See SWAPE comment regarding the individual construction phase lengths.

Trips and VMT - Consistent with the Staff Report's model.

Demolition - Consistent with the Staff Report's model.

Grading - Consistent with the Staff Report's model.

Vehicle Trips - Consistent with the Staff Report's model.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation.

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	35,000.00
tblLandUse	LandUseSquareFeet	18,400.00	18,415.00
tblLandUse	LandUseSquareFeet	68,400.00	69,000.00
tblLandUse	LandUseSquareFeet	3,200.00	10,500.00
tblLandUse	LandUseSquareFeet	328,152.00	135,850.00
tblLandUse	LotAcreage	0.42	0.10
tblLandUse	LotAcreage	1.54	0.50
tblLandUse	LotAcreage	0.07	0.10
tblLandUse	LotAcreage	7.53	0.25
tblTripsAndVMT	HaulingTripLength	20.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	ST_TR	2.46	11.31
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	8.19	4.02
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	1.05	11.31
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	5.95	4.02
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	11.03	11.31
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.17	4.02
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary



## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.9827	176.9534	29.9934	0.4211	13.8170	1.0448	14.7772	4.8310	0.9752	5.7263	0.0000	44,528.2675	44,528.2675	5.0659	0.0000	44,654.9140
2022	324.6530	18.9982	18.8674	0.0557	2.4267	0.6109	3.0376	0.6537	0.5895	1.2433	0.0000	5,455.2826	5,455.2826	0.5283	0.0000	5,468.4899
Maximum	324.6530	176.9534	29.9934	0.4211	13.8170	1.0448	14.7772	4.8310	0.9752	5.7263	0.0000	44,528.2675	44,528.2675	5.0659	0.0000	44,654.9140

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.9827	176.9534	29.9934	0.4211	13.8170	1.0448	14.7772	4.8310	0.9752	5.7263	0.0000	44,528.2675	44,528.2675	5.0659	0.0000	44,654.9140
2022	324.6530	18.9982	18.8674	0.0557	2.4267	0.6109	3.0376	0.6537	0.5895	1.2433	0.0000	5,455.2826	5,455.2826	0.5283	0.0000	5,468.4899
Maximum	324.6530	176.9534	29.9934	0.4211	13.8170	1.0448	14.7772	4.8310	0.9752	5.7263	0.0000	44,528.2675	44,528.2675	5.0659	0.0000	44,654.9140

[illegible]

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
Energy	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955
Mobile	1.6129	13.3886	17.3259	0.0778	6.0528	0.0553	6.1081	1.6194	0.0518	1.6712		7,955.7931	7,955.7931	0.4714		7,967.5770
<b>Total</b>	<b>5.8536</b>	<b>15.6055</b>	<b>19.2318</b>	<b>0.0911</b>	<b>6.0528</b>	<b>0.2239</b>	<b>6.2767</b>	<b>1.6194</b>	<b>0.2204</b>	<b>1.8398</b>		<b>10,615.6770</b>	<b>10,615.6770</b>	<b>0.5226</b>	<b>0.0488</b>	<b>10,643.2728</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
Energy	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955
Mobile	1.6129	13.3886	17.3259	0.0778	6.0528	0.0553	6.1081	1.6194	0.0518	1.6712		7,955.7931	7,955.7931	0.4714		7,967.5770
<b>Total</b>	<b>5.8536</b>	<b>15.6055</b>	<b>19.2318</b>	<b>0.0911</b>	<b>6.0528</b>	<b>0.2239</b>	<b>6.2767</b>	<b>1.6194</b>	<b>0.2204</b>	<b>1.8398</b>		<b>10,615.6770</b>	<b>10,615.6770</b>	<b>0.5226</b>	<b>0.0488</b>	<b>10,643.2728</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

---

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2021	6/28/2021	5	20	
2	Site Preparation	Site Preparation	6/29/2021	6/30/2021	5	2	
3	Grading	Grading	7/1/2021	7/6/2021	5	4	
4	Building Construction	Building Construction	7/7/2021	4/12/2022	5	200	
5	Paving	Paving	4/13/2022	4/26/2022	5	10	
6	Architectural Coating	Architectural Coating	4/27/2022	5/10/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 521,501; Non-Residential Outdoor: 173,834; Striped Parking Area: 4,332 (Architectural Coating – sqft)

#### OffRoad Equipment

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	6.00	59.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	6.00	4,375.00	14.70	6.90	8.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	177.00	70.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6427	0.0000	0.6427	0.0973	0.0000	0.0973			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.717 1	2,322.717 1	0.5940		2,337.565 8
<b>Total</b>	<b>1.9930</b>	<b>19.6966</b>	<b>14.4925</b>	<b>0.0241</b>	<b>0.6427</b>	<b>1.0409</b>	<b>1.6836</b>	<b>0.0973</b>	<b>0.9715</b>	<b>1.0688</b>		<b>2,322.717 1</b>	<b>2,322.717 1</b>	<b>0.5940</b>		<b>2,337.565 8</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0151	0.6456	0.0984	2.1700e-003	0.0516	1.9800e-003	0.0536	0.0142	1.9000e-003	0.0160		229.8794	229.8794	0.0150		230.2539
Vendor	0.0149	0.5505	0.1172	1.5000e-003	0.0384	1.0900e-003	0.0395	0.0111	1.0400e-003	0.0121		157.7839	157.7839	0.0131		158.1107
Worker	0.0605	0.0363	0.3880	1.2500e-003	0.1453	8.6000e-004	0.1462	0.0385	7.9000e-004	0.0393		124.1752	124.1752	2.8700e-003		124.2469
<b>Total</b>	<b>0.0905</b>	<b>1.2323</b>	<b>0.6035</b>	<b>4.9200e-003</b>	<b>0.2353</b>	<b>3.9300e-003</b>	<b>0.2393</b>	<b>0.0638</b>	<b>3.7300e-003</b>	<b>0.0675</b>		<b>511.8384</b>	<b>511.8384</b>	<b>0.0309</b>		<b>512.6115</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6427	0.0000	0.6427	0.0973	0.0000	0.0973			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.717 1	2,322.717 1	0.5940		2,337.565 8
<b>Total</b>	<b>1.9930</b>	<b>19.6966</b>	<b>14.4925</b>	<b>0.0241</b>	<b>0.6427</b>	<b>1.0409</b>	<b>1.6836</b>	<b>0.0973</b>	<b>0.9715</b>	<b>1.0688</b>	<b>0.0000</b>	<b>2,322.717 1</b>	<b>2,322.717 1</b>	<b>0.5940</b>		<b>2,337.565 8</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.2 Demolition - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0151	0.6456	0.0984	2.1700e-003	0.0516	1.9800e-003	0.0536	0.0142	1.9000e-003	0.0160		229.8794	229.8794	0.0150		230.2539
Vendor	0.0149	0.5505	0.1172	1.5000e-003	0.0384	1.0900e-003	0.0395	0.0111	1.0400e-003	0.0121		157.7839	157.7839	0.0131		158.1107
Worker	0.0605	0.0363	0.3880	1.2500e-003	0.1453	8.6000e-004	0.1462	0.0385	7.9000e-004	0.0393		124.1752	124.1752	2.8700e-003		124.2469
<b>Total</b>	<b>0.0905</b>	<b>1.2323</b>	<b>0.6035</b>	<b>4.9200e-003</b>	<b>0.2353</b>	<b>3.9300e-003</b>	<b>0.2393</b>	<b>0.0638</b>	<b>3.7300e-003</b>	<b>0.0675</b>		<b>511.8384</b>	<b>511.8384</b>	<b>0.0309</b>		<b>512.6115</b>

**3.3 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041		1,666.5174	1,666.5174	0.5390		1,679.9920
<b>Total</b>	<b>1.5558</b>	<b>17.4203</b>	<b>7.5605</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.7654</b>	<b>6.5650</b>	<b>2.9537</b>	<b>0.7041</b>	<b>3.6578</b>		<b>1,666.5174</b>	<b>1,666.5174</b>	<b>0.5390</b>		<b>1,679.9920</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.3 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0224	0.2387	7.7000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		76.4155	76.4155	1.7700e-003		76.4596
<b>Total</b>	<b>0.0372</b>	<b>0.0224</b>	<b>0.2387</b>	<b>7.7000e-004</b>	<b>0.0894</b>	<b>5.3000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>4.9000e-004</b>	<b>0.0242</b>		<b>76.4155</b>	<b>76.4155</b>	<b>1.7700e-003</b>		<b>76.4596</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920
<b>Total</b>	<b>1.5558</b>	<b>17.4203</b>	<b>7.5605</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.7654</b>	<b>6.5650</b>	<b>2.9537</b>	<b>0.7041</b>	<b>3.6578</b>	<b>0.0000</b>	<b>1,666.5174</b>	<b>1,666.5174</b>	<b>0.5390</b>		<b>1,679.9920</b>



## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.3 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0224	0.2387	7.7000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		76.4155	76.4155	1.7700e-003		76.4596
<b>Total</b>	<b>0.0372</b>	<b>0.0224</b>	<b>0.2387</b>	<b>7.7000e-004</b>	<b>0.0894</b>	<b>5.3000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>4.9000e-004</b>	<b>0.0242</b>		<b>76.4155</b>	<b>76.4155</b>	<b>1.7700e-003</b>		<b>76.4596</b>

**3.4 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0223	0.0000	6.0223	2.6934	0.0000	2.6934			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
<b>Total</b>	<b>1.2884</b>	<b>14.3307</b>	<b>6.3314</b>	<b>0.0141</b>	<b>6.0223</b>	<b>0.6379</b>	<b>6.6602</b>	<b>2.6934</b>	<b>0.5869</b>	<b>3.2803</b>		<b>1,365.0648</b>	<b>1,365.0648</b>	<b>0.4415</b>		<b>1,376.1020</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.4 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.6423	162.0498	23.3060	0.4047	7.6668	0.3207	7.9875	2.1029	0.3068	2.4097		42,929.0033	42,929.0033	4.6095		43,044.2416
Vendor	0.0149	0.5505	0.1172	1.5000e-003	0.0384	1.0900e-003	0.0395	0.0111	1.0400e-003	0.0121		157.7839	157.7839	0.0131		158.1107
Worker	0.0372	0.0224	0.2387	7.7000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		76.4155	76.4155	1.7700e-003		76.4596
<b>Total</b>	<b>3.6944</b>	<b>162.6226</b>	<b>23.6620</b>	<b>0.4070</b>	<b>7.7947</b>	<b>0.3223</b>	<b>8.1170</b>	<b>2.1376</b>	<b>0.3083</b>	<b>2.4460</b>		<b>43,163.2027</b>	<b>43,163.2027</b>	<b>4.6244</b>		<b>43,278.8119</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0223	0.0000	6.0223	2.6934	0.0000	2.6934			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020
<b>Total</b>	<b>1.2884</b>	<b>14.3307</b>	<b>6.3314</b>	<b>0.0141</b>	<b>6.0223</b>	<b>0.6379</b>	<b>6.6602</b>	<b>2.6934</b>	<b>0.5869</b>	<b>3.2803</b>	<b>0.0000</b>	<b>1,365.0648</b>	<b>1,365.0648</b>	<b>0.4415</b>		<b>1,376.1020</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.4 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.6423	162.0498	23.3060	0.4047	7.6668	0.3207	7.9875	2.1029	0.3068	2.4097		42,929.0033	42,929.0033	4.6095		43,044.2416
Vendor	0.0149	0.5505	0.1172	1.5000e-003	0.0384	1.0900e-003	0.0395	0.0111	1.0400e-003	0.0121		157.7839	157.7839	0.0131		158.1107
Worker	0.0372	0.0224	0.2387	7.7000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		76.4155	76.4155	1.7700e-003		76.4596
<b>Total</b>	<b>3.6944</b>	<b>162.6226</b>	<b>23.6620</b>	<b>0.4070</b>	<b>7.7947</b>	<b>0.3223</b>	<b>8.1170</b>	<b>2.1376</b>	<b>0.3083</b>	<b>2.4460</b>		<b>43,163.2027</b>	<b>43,163.2027</b>	<b>4.6244</b>		<b>43,278.8119</b>

**3.5 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>		<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.5 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1736	6.4220	1.3672	0.0175	0.4482	0.0127	0.4609	0.1291	0.0121	0.1412		1,840.8125	1,840.8125	0.1525		1,844.6244
Worker	0.8235	0.4944	5.2822	0.0170	1.9784	0.0117	1.9901	0.5247	0.0107	0.5354		1,690.6926	1,690.6926	0.0391		1,691.6693
<b>Total</b>	<b>0.9971</b>	<b>6.9164</b>	<b>6.6494</b>	<b>0.0344</b>	<b>2.4267</b>	<b>0.0244</b>	<b>2.4510</b>	<b>0.6537</b>	<b>0.0229</b>	<b>0.6766</b>		<b>3,531.5051</b>	<b>3,531.5051</b>	<b>0.1915</b>		<b>3,536.2936</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>	<b>0.0000</b>	<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.5 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1736	6.4220	1.3672	0.0175	0.4482	0.0127	0.4609	0.1291	0.0121	0.1412		1,840.8125	1,840.8125	0.1525		1,844.6244
Worker	0.8235	0.4944	5.2822	0.0170	1.9784	0.0117	1.9901	0.5247	0.0107	0.5354		1,690.6926	1,690.6926	0.0391		1,691.6693
<b>Total</b>	<b>0.9971</b>	<b>6.9164</b>	<b>6.6494</b>	<b>0.0344</b>	<b>2.4267</b>	<b>0.0244</b>	<b>2.4510</b>	<b>0.6537</b>	<b>0.0229</b>	<b>0.6766</b>		<b>3,531.5051</b>	<b>3,531.5051</b>	<b>0.1915</b>		<b>3,536.2936</b>

**3.5 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
<b>Total</b>	<b>1.6487</b>	<b>12.5031</b>	<b>12.7264</b>	<b>0.0221</b>		<b>0.5889</b>	<b>0.5889</b>		<b>0.5689</b>	<b>0.5689</b>		<b>2,001.5429</b>	<b>2,001.5429</b>	<b>0.3486</b>		<b>2,010.2581</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.5 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1621	6.0504	1.2762	0.0173	0.4482	0.0107	0.4589	0.1291	0.0102	0.1393		1,824.740 0	1,824.740 0	0.1446		1,828.353 7
Worker	0.7726	0.4448	4.8647	0.0163	1.9784	0.0114	1.9898	0.5247	0.0105	0.5351		1,628.999 8	1,628.999 8	0.0351		1,629.878 1
<b>Total</b>	<b>0.9346</b>	<b>6.4951</b>	<b>6.1410</b>	<b>0.0336</b>	<b>2.4267</b>	<b>0.0220</b>	<b>2.4487</b>	<b>0.6537</b>	<b>0.0207</b>	<b>0.6744</b>		<b>3,453.739 8</b>	<b>3,453.739 8</b>	<b>0.1797</b>		<b>3,458.231 8</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.542 9	2,001.542 9	0.3486		2,010.258 1
<b>Total</b>	<b>1.6487</b>	<b>12.5031</b>	<b>12.7264</b>	<b>0.0221</b>		<b>0.5889</b>	<b>0.5889</b>		<b>0.5689</b>	<b>0.5689</b>	<b>0.0000</b>	<b>2,001.542 9</b>	<b>2,001.542 9</b>	<b>0.3486</b>		<b>2,010.258 1</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.5 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1621	6.0504	1.2762	0.0173	0.4482	0.0107	0.4589	0.1291	0.0102	0.1393		1,824.740 0	1,824.740 0	0.1446		1,828.353 7
Worker	0.7726	0.4448	4.8647	0.0163	1.9784	0.0114	1.9898	0.5247	0.0105	0.5351		1,628.999 8	1,628.999 8	0.0351		1,629.878 1
<b>Total</b>	<b>0.9346</b>	<b>6.4951</b>	<b>6.1410</b>	<b>0.0336</b>	<b>2.4267</b>	<b>0.0220</b>	<b>2.4487</b>	<b>0.6537</b>	<b>0.0207</b>	<b>0.6744</b>		<b>3,453.739 8</b>	<b>3,453.739 8</b>	<b>0.1797</b>		<b>3,458.231 8</b>

**3.6 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.378 9	1,297.378 9	0.4113		1,307.660 8
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7139</b>	<b>6.7738</b>	<b>8.8060</b>	<b>0.0135</b>		<b>0.3474</b>	<b>0.3474</b>		<b>0.3205</b>	<b>0.3205</b>		<b>1,297.378 9</b>	<b>1,297.378 9</b>	<b>0.4113</b>		<b>1,307.660 8</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.6 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0567	0.0327	0.3573	1.2000e-003	0.1453	8.3000e-004	0.1461	0.0385	7.7000e-004	0.0393		119.6441	119.6441	2.5800e-003		119.7086
<b>Total</b>	<b>0.0567</b>	<b>0.0327</b>	<b>0.3573</b>	<b>1.2000e-003</b>	<b>0.1453</b>	<b>8.3000e-004</b>	<b>0.1461</b>	<b>0.0385</b>	<b>7.7000e-004</b>	<b>0.0393</b>		<b>119.6441</b>	<b>119.6441</b>	<b>2.5800e-003</b>		<b>119.7086</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7139</b>	<b>6.7738</b>	<b>8.8060</b>	<b>0.0135</b>		<b>0.3474</b>	<b>0.3474</b>		<b>0.3205</b>	<b>0.3205</b>	<b>0.0000</b>	<b>1,297.3789</b>	<b>1,297.3789</b>	<b>0.4113</b>		<b>1,307.6608</b>



## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.6 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0567	0.0327	0.3573	1.2000e-003	0.1453	8.3000e-004	0.1461	0.0385	7.7000e-004	0.0393		119.6441	119.6441	2.5800e-003		119.7086
<b>Total</b>	<b>0.0567</b>	<b>0.0327</b>	<b>0.3573</b>	<b>1.2000e-003</b>	<b>0.1453</b>	<b>8.3000e-004</b>	<b>0.1461</b>	<b>0.0385</b>	<b>7.7000e-004</b>	<b>0.0393</b>		<b>119.6441</b>	<b>119.6441</b>	<b>2.5800e-003</b>		<b>119.7086</b>

**3.7 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	324.2957					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>324.5002</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.7 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		322.1186	322.1186	6.9500e-003		322.2923
<b>Total</b>	<b>0.1528</b>	<b>0.0880</b>	<b>0.9620</b>	<b>3.2300e-003</b>	<b>0.3912</b>	<b>2.2400e-003</b>	<b>0.3935</b>	<b>0.1038</b>	<b>2.0700e-003</b>	<b>0.1058</b>		<b>322.1186</b>	<b>322.1186</b>	<b>6.9500e-003</b>		<b>322.2923</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	324.2957					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>324.5002</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**3.7 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		322.1186	322.1186	6.9500e-003		322.2923
<b>Total</b>	<b>0.1528</b>	<b>0.0880</b>	<b>0.9620</b>	<b>3.2300e-003</b>	<b>0.3912</b>	<b>2.2400e-003</b>	<b>0.3935</b>	<b>0.1038</b>	<b>2.0700e-003</b>	<b>0.1058</b>		<b>322.1186</b>	<b>322.1186</b>	<b>6.9500e-003</b>		<b>322.2923</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6129	13.3886	17.3259	0.0778	6.0528	0.0553	6.1081	1.6194	0.0518	1.6712		7,955.793 1	7,955.793 1	0.4714		7,967.577 0
Unmitigated	1.6129	13.3886	17.3259	0.0778	6.0528	0.0553	6.1081	1.6194	0.0518	1.6712		7,955.793 1	7,955.793 1	0.4714		7,967.577 0

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	208.10	208.10	208.10	670,399	670,399
Health Club	0.00	0.00	0.00		
Hotel	908.52	908.52	908.52	2,167,884	2,167,884
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,116.62	1,116.62	1,116.62	2,838,283	2,838,283

## 4.3 Trip Type Information

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
General Office Building	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Health Club	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Hotel	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Recreational Swimming Pool	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955
NaturalGas Unmitigated	0.2438	2.2165	1.8619	0.0133		0.1685	0.1685		0.1685	0.1685		2,659.7897	2,659.7897	0.0510	0.0488	2,675.5955

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	175.069	1.8900e-003	0.0172	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003		20.5963	20.5963	3.9000e-004	3.8000e-004	20.7187
Health Club	97.9151	1.0600e-003	9.6000e-003	8.0600e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5194	11.5194	2.2000e-004	2.1000e-004	11.5879
Hotel	22335.2	0.2409	2.1897	1.8394	0.0131		0.1664	0.1664		0.1664	0.1664		2,627.6740	2,627.6740	0.0504	0.0482	2,643.2889
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.2438</b>	<b>2.2165</b>	<b>1.8619</b>	<b>0.0133</b>		<b>0.1685</b>	<b>0.1685</b>		<b>0.1685</b>	<b>0.1685</b>		<b>2,659.7897</b>	<b>2,659.7897</b>	<b>0.0510</b>	<b>0.0488</b>	<b>2,675.5955</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.175069	1.8900e-003	0.0172	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003		20.5963	20.5963	3.9000e-004	3.8000e-004	20.7187
Health Club	0.0979151	1.0600e-003	9.6000e-003	8.0600e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5194	11.5194	2.2000e-004	2.1000e-004	11.5879
Hotel	22.3352	0.2409	2.1897	1.8394	0.0131		0.1664	0.1664		0.1664	0.1664		2,627.6740	2,627.6740	0.0504	0.0482	2,643.2889
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.2438</b>	<b>2.2165</b>	<b>1.8619</b>	<b>0.0133</b>		<b>0.1685</b>	<b>0.1685</b>		<b>0.1685</b>	<b>0.1685</b>		<b>2,659.7897</b>	<b>2,659.7897</b>	<b>0.0510</b>	<b>0.0488</b>	<b>2,675.5955</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**



## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
Unmitigated	3.9970	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8885					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0900e-003	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
<b>Total</b>	<b>3.9970</b>	<b>4.0000e-004</b>	<b>0.0440</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0941</b>	<b>0.0941</b>	<b>2.5000e-004</b>		<b>0.1003</b>

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8885					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0900e-003	4.0000e-004	0.0440	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0941	0.0941	2.5000e-004		0.1003
<b>Total</b>	<b>3.9970</b>	<b>4.0000e-004</b>	<b>0.0440</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0941</b>	<b>0.0941</b>	<b>2.5000e-004</b>		<b>0.1003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Dual Brand Marriot Hotel - Riverside-South Coast County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

---

# Attachment C

Start date and time 04/26/21 14:29:37

AERSCREEN 16216

Marriot Hotel Construction

Marriot Hotel Construction

## ----- DATA ENTRY VALIDATION -----

METRIC

ENGLISH

\*\* AREADATA \*\*

Emission Rate: 0.879E-03 g/s 0.698E-02 lb/hr

Area Height: 3.00 meters 9.84 feet

Area Source Length: 70.00 meters 229.66 feet

Area Source Width: 55.00 meters 180.45 feet

Vertical Dimension: 1.50 meters 4.92 feet

Model Mode: URBAN

Population: 326414

Dist to Ambient Air: 1.0 meters 3. feet

\*\* BUILDING DATA \*\*

No Building Downwash Parameters

\*\* TERRAIN DATA \*\*

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

\*\* FUMIGATION DATA \*\*

No fumigation requested

\*\* METEOROLOGY DATA \*\*

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity ( $u^*$ ): not adjusted

DEBUG OPTION ON

AERSCREEN output file:

2021.04.26\_MarriotHotel\_Construction.out

\*\*\* AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

\*\*\*\*\*

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen\_01\_01.sfc & aerscreen\_01\_01.pfl

Creating met files aerscreen\_02\_01.sfc & aerscreen\_02\_01.pfl

Creating met files aerscreen\_03\_01.sfc & aerscreen\_03\_01.pfl

Creating met files aerscreen\_04\_01.sfc & aerscreen\_04\_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 04/26/21 14:31:12

\*\*\*\*\*

Running AERMOD

Processing Winter

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*



\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Running AERMOD

Processing Spring

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Running AERMOD

Processing Summer

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40



\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Running AERMOD

Processing Autumn

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 40

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

FLOWSECTOR ended 04/26/21 14:31:21

REFINE started 04/26/21 14:31:21

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

REFINE ended 04/26/21 14:31:21

\*\*\*\*\*

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

\*\*\*\*\*

Ending date and time 04/26/21 14:31:23

Concentration			Distance	Elevation	Diag	Season/Month			Zo sector		Date	
H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS
REF	TA	HT										HT
	0.31880E+01		1.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.42036E+01		25.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
*	0.45221E+01		36.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.38245E+01		50.00	0.00	30.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.19935E+01		75.00	0.00	30.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.13362E+01		100.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.99140E+00		125.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.77531E+00		150.00	0.00	5.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.62948E+00		175.00	0.00	5.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.52550E+00		200.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.44775E+00		225.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.38805E+00		250.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.34089E+00		275.00	0.00	5.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.30284E+00		300.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.27158E+00		325.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.24551E+00		350.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0

310.0	2.0										
	0.22338E+00	375.00	0.00	5.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.20453E+00	400.00	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18827E+00	425.00	0.00	5.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.17415E+00	450.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.16180E+00	475.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.15086E+00	500.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.14112E+00	525.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.13241E+00	550.00	0.00	5.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12461E+00	575.00	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11758E+00	600.00	0.00	15.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11120E+00	625.00	0.00	15.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10539E+00	649.99	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10010E+00	675.00	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.95242E-01	700.00	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.90783E-01	725.00	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.86679E-01	750.00	0.00	5.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.82894E-01	775.00	0.00	5.0	Winter	0-360	10011001				

-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.79385E-01		800.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.76132E-01		825.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.73105E-01		850.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.70270E-01		875.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.67616E-01		900.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.65119E-01		925.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.62779E-01		950.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.60893E-01		975.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.58812E-01		1000.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.56852E-01		1025.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.55003E-01		1050.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.53256E-01		1075.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.51601E-01		1100.00		0.00	5.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.50033E-01		1125.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.48546E-01		1150.00		0.00	5.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
	0.47134E-01		1175.00		0.00	0.0	Winter		0-360	10011001	
-1.30 310.0	0.043 2.0	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0

0.45791E-01	1200.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.44513E-01	1225.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.43296E-01	1250.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.42135E-01	1275.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.41028E-01	1300.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.39969E-01	1325.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.38957E-01	1350.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.37989E-01	1375.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.37061E-01	1400.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.36173E-01	1425.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.35320E-01	1450.00	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.34502E-01	1475.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.33715E-01	1500.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.32960E-01	1525.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.32233E-01	1550.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.31533E-01	1574.99	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.30860E-01	1600.00	0.00	35.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				



310.0	2.0											
	0.30211E-01	1625.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.29585E-01	1650.00	0.00	20.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.28981E-01	1675.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.28399E-01	1700.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.27836E-01	1725.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.27292E-01	1750.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.26767E-01	1775.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.26259E-01	1800.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.25767E-01	1825.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.25291E-01	1850.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.24830E-01	1875.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.24384E-01	1899.99	0.00	25.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.23951E-01	1924.99	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.23531E-01	1950.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.23124E-01	1975.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.22729E-01	2000.00	0.00	15.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.22345E-01	2025.00	0.00	0.0		Winter	0-360	10011001				

-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.21972E-01		2050.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.21611E-01		2075.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.21259E-01		2100.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.20917E-01		2124.99		0.00	25.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.20585E-01		2150.00		0.00	30.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.20261E-01		2175.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.19947E-01		2200.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.19640E-01		2225.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.19342E-01		2250.00		0.00	15.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.19051E-01		2275.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18768E-01		2300.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18492E-01		2325.00		0.00	40.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18224E-01		2350.00		0.00	25.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.17961E-01		2375.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.17706E-01		2400.00		0.00	0.0		Winter	0-360	10011001	
-1.30</											

0.17213E-01	2449.99	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.16975E-01	2475.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.16743E-01	2500.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.16516E-01	2525.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.16295E-01	2550.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.16079E-01	2575.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.15867E-01	2600.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.15661E-01	2625.00	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.15459E-01	2650.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.15262E-01	2675.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.15068E-01	2700.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.14879E-01	2725.00	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.14695E-01	2750.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.14514E-01	2775.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.14337E-01	2800.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.14163E-01	2825.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.13993E-01	2850.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		

310.0	2.0											
	0.13827E-01	2875.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.13664E-01	2900.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.13504E-01	2925.00	0.00	30.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.13348E-01	2950.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.13195E-01	2975.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.13044E-01	2999.99	0.00	25.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.12897E-01	3025.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.12753E-01	3050.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.12611E-01	3075.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.12472E-01	3100.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.12335E-01	3125.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.12202E-01	3150.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.12070E-01	3175.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.11942E-01	3199.99	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.11815E-01	3225.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.11691E-01	3250.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.11569E-01	3275.00	0.00	0.0		Winter	0-360	10011001				

-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11449E-01		3300.00		0.00	30.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11331E-01		3325.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11216E-01		3350.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11102E-01		3375.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10991E-01		3400.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10881E-01		3425.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10773E-01		3450.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10667E-01		3475.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10563E-01		3500.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10461E-01		3525.00		0.00	25.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10360E-01		3550.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10261E-01		3575.00		0.00	15.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10164E-01		3600.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10068E-01		3625.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.99737E-02		3650.00		0.00	40.0		Winter	0-360	10011001	
-1.30											

0.97898E-02	3699.99	0.00	40.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.97000E-02	3724.99	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.96116E-02	3750.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.95246E-02	3775.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.94389E-02	3800.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.93546E-02	3825.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.92716E-02	3849.99	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.91899E-02	3875.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.91094E-02	3900.00	0.00	40.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.90301E-02	3925.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.89519E-02	3950.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.88750E-02	3975.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.87992E-02	4000.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.87245E-02	4025.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.86509E-02	4050.00	0.00	30.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.85784E-02	4075.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.85069E-02	4100.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			

310.0	2.0											
	0.84364E-02	4125.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.83670E-02	4149.99	0.00	20.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.82985E-02	4175.00	0.00	25.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.82310E-02	4200.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.81644E-02	4225.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.80988E-02	4250.00	0.00	15.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.80341E-02	4275.00	0.00	15.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.79702E-02	4300.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.79073E-02	4325.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.78452E-02	4350.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.77839E-02	4375.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.77235E-02	4400.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.76638E-02	4425.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.76050E-02	4449.99	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.75469E-02	4475.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.74896E-02	4499.99	0.00	35.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.74331E-02	4525.00	0.00	5.0		Winter	0-360	10011001				

-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.73773E-02		4550.00		0.00	35.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.73222E-02		4575.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.72678E-02		4599.99		0.00	40.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.72141E-02		4625.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.71611E-02		4650.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.71088E-02		4675.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.70571E-02		4700.00		0.00	15.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.70061E-02		4725.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.69557E-02		4750.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.69059E-02		4775.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.68568E-02		4800.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.68082E-02		4825.00		0.00	40.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.67602E-02		4850.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.67129E-02		4875.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.66661E-02		4900.00		0.00	5.0		Winter	0-360	10011001	
-1.											



0.65741E-02	4950.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.65290E-02	4975.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.64844E-02	5000.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						

Start date and time 04/26/21 14:32:53

AERSCREEN 16216

Marriot Hotel Operation

Marriot Hotel Operation

----- DATA ENTRY VALIDATION -----

METRIC

ENGLISH

\*\* AREADATA \*\*

Emission Rate: 0.863E-03 g/s 0.685E-02 lb/hr

Area Height: 3.00 meters 9.84 feet

Area Source Length: 70.00 meters 229.66 feet

Area Source Width: 55.00 meters 180.45 feet

Vertical Dimension: 1.50 meters 4.92 feet

Model Mode: URBAN

Population: 326414

Dist to Ambient Air: 1.0 meters 3. feet

\*\* BUILDING DATA \*\*

No Building Downwash Parameters

\*\* TERRAIN DATA \*\*

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

\*\* FUMIGATION DATA \*\*

No fumigation requested

\*\* METEOROLOGY DATA \*\*

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity ( $u^*$ ): not adjusted

DEBUG OPTION ON

AERSCREEN output file:

2021.04.26\_MarriotHotel\_Operation.out

\*\*\* AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

\*\*\*\*\*

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen\_01\_01.sfc & aerscreen\_01\_01.pfl

Creating met files aerscreen\_02\_01.sfc & aerscreen\_02\_01.pfl

Creating met files aerscreen\_03\_01.sfc & aerscreen\_03\_01.pfl

Creating met files aerscreen\_04\_01.sfc & aerscreen\_04\_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 04/26/21 14:35:06

\*\*\*\*\*

Running AERMOD

Processing Winter

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Running AERMOD



Processing Spring

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Running AERMOD

Processing Summer

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Running AERMOD

Processing Autumn

Processing surface roughness sector 1

\*\*\*\*\*

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*



\*\*\*\*\*

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 35

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\*

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 40

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

FLOWSECTOR ended 04/26/21 14:35:15

REFINE started 04/26/21 14:35:15

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

REFINE ended 04/26/21 14:35:15

\*\*\*\*\*

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

\*\*\*\*\*

Ending date and time 04/26/21 14:35:17

Concentration			Distance	Elevation	Diag	Season/Month			Zo sector		Date	
H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS
REF	TA	HT										HT
	0.31294E+01		1.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.41263E+01		25.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
*	0.44389E+01		36.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.37541E+01		50.00	0.00	30.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.19568E+01		75.00	0.00	30.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.13116E+01		100.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.97316E+00		125.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.76105E+00		150.00	0.00	5.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.61791E+00		175.00	0.00	5.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.51584E+00		200.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.43952E+00		225.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.38092E+00		250.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.33463E+00		275.00	0.00	5.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.29727E+00		300.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.26658E+00		325.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0											
	0.24100E+00		350.00	0.00	0.0			Winter		0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0

310.0	2.0										
	0.21927E+00	375.00	0.00	5.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.20077E+00	400.00	0.00	10.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.18481E+00	425.00	0.00	5.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.17095E+00	450.00	0.00	0.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.15883E+00	475.00	0.00	0.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.14809E+00	500.00	0.00	0.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.13852E+00	525.00	0.00	0.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.12997E+00	550.00	0.00	5.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.12231E+00	575.00	0.00	10.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.11541E+00	600.00	0.00	15.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.10916E+00	625.00	0.00	15.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.10345E+00	649.99	0.00	10.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.98256E-01	675.00	0.00	10.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.93491E-01	700.00	0.00	10.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.89114E-01	725.00	0.00	10.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.85085E-01	750.00	0.00	5.0		Winter	0-360	10011001			
-1.30	0.043 -9.000	0.020 -999.	21.		6.0 1.000 1.50		0.35	0.50	10.0		
310.0	2.0										
	0.81369E-01	775.00	0.00	5.0		Winter	0-360	10011001			

-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.77925E-01		800.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.74732E-01		825.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.71760E-01		850.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.68978E-01		875.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.66373E-01		900.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.63922E-01		925.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.61624E-01		950.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.59773E-01		975.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.57731E-01		1000.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.55807E-01		1025.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.53992E-01		1050.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.52277E-01		1075.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.50652E-01		1100.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.49113E-01		1125.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.47653E-01		1150.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043										

0.44949E-01	1200.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.43695E-01	1225.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.42500E-01	1250.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.41361E-01	1275.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.40273E-01	1300.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.39234E-01	1325.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.38241E-01	1350.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.37290E-01	1375.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.36380E-01	1400.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.35507E-01	1425.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.34670E-01	1450.00	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.33867E-01	1475.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.33095E-01	1500.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.32354E-01	1525.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.31640E-01	1550.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.30954E-01	1575.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.30292E-01	1600.00	0.00	35.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				

310.0	2.0											
	0.29655E-01	1625.00	0.00	35.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.29041E-01	1650.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.28448E-01	1675.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.27877E-01	1700.00	0.00	15.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.27324E-01	1725.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.26791E-01	1750.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.26275E-01	1775.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.25776E-01	1800.00	0.00	25.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.25293E-01	1825.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.24826E-01	1850.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.24373E-01	1875.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.23935E-01	1899.99	0.00	25.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.23510E-01	1924.99	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.23098E-01	1950.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.22698E-01	1975.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.22311E-01	2000.00	0.00	35.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.21934E-01	2025.00	0.00	0.0		Winter	0-360	10011001				

-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.21568E-01		2050.00		0.00	30.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.21213E-01		2075.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.20868E-01		2100.00		0.00	15.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.20532E-01		2125.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.20206E-01		2150.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.19889E-01		2175.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.19580E-01		2200.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.19279E-01		2225.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18986E-01		2250.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18701E-01		2275.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18423E-01		2300.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.18152E-01		2325.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.17888E-01		2350.00		0.00	25.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.17631E-01		2375.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.17380E-01		2399.99		0.00	35.0		Winter	0-360	10011001	
-1.30											



0.16896E-01	2450.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.16663E-01	2475.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.16435E-01	2500.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.16213E-01	2525.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.15995E-01	2550.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.15783E-01	2575.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.15576E-01	2600.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.15373E-01	2625.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.15175E-01	2650.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.14981E-01	2675.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.14791E-01	2700.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.14606E-01	2725.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.14424E-01	2750.00	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.14247E-01	2775.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.14073E-01	2800.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.13903E-01	2825.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				
310.0 2.0						
0.13736E-01	2850.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35 0.50 10.0				

310.0	2.0										
	0.13573E-01	2875.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.13413E-01	2900.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.13256E-01	2925.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.13103E-01	2950.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12952E-01	2975.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12805E-01	3000.00	0.00	5.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12660E-01	3025.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12518E-01	3050.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12379E-01	3075.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12243E-01	3100.00	0.00	5.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.12109E-01	3125.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11977E-01	3150.00	0.00	5.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11848E-01	3174.99	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11722E-01	3199.99	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11598E-01	3225.00	0.00	10.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11476E-01	3250.00	0.00	0.0	Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11356E-01	3275.00	0.00	0.0	Winter	0-360	10011001				

-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11238E-01		3300.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11123E-01		3325.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.11010E-01		3350.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10898E-01		3375.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10789E-01		3400.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10681E-01		3425.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10575E-01		3450.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10471E-01		3475.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10369E-01		3500.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10269E-01		3525.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10170E-01		3550.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.10073E-01		3575.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.99769E-02		3600.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.98828E-02		3625.00		0.00	40.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.97903E-02		3650.00		0.00	40.0		Winter	0-360	10011001	
-1.30											

0.96097E-02	3699.99	0.00	40.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.95216E-02	3724.99	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.94348E-02	3750.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.93494E-02	3775.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.92654E-02	3800.00	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.91826E-02	3825.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.91011E-02	3849.99	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.90209E-02	3875.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.89418E-02	3900.00	0.00	40.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.88640E-02	3925.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.87873E-02	3950.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.87118E-02	3975.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.86374E-02	4000.00	0.00	10.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.85641E-02	4025.00	0.00	5.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.84918E-02	4050.00	0.00	30.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.84206E-02	4074.99	0.00	35.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			
310.0 2.0						
0.83505E-02	4100.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999.	21.	6.0 1.000 1.50	0.35 0.50 10.0			

310.0	2.0											
	0.82813E-02	4125.00	0.00	30.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.82131E-02	4149.99	0.00	20.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.81459E-02	4175.00	0.00	25.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.80796E-02	4200.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.80143E-02	4225.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.79499E-02	4250.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.78863E-02	4275.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.78237E-02	4300.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.77619E-02	4325.00	0.00	0.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.77009E-02	4350.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.76408E-02	4375.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.75814E-02	4400.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.75229E-02	4425.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.74652E-02	4449.99	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.74082E-02	4475.00	0.00	5.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.73519E-02	4500.00	0.00	10.0		Winter	0-360	10011001				
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
310.0	2.0											
	0.72964E-02	4525.00	0.00	10.0		Winter	0-360	10011001				

-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.72416E-02		4550.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.71875E-02		4575.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.71341E-02		4599.99		0.00	40.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.70814E-02		4625.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.70294E-02		4650.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.69780E-02		4675.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.69273E-02		4700.00		0.00	35.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.68772E-02		4725.00		0.00	25.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.68278E-02		4750.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.67789E-02		4775.00		0.00	20.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.67307E-02		4800.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.66830E-02		4825.00		0.00	0.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.66359E-02		4850.00		0.00	5.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.65894E-02		4875.00		0.00	25.0		Winter	0-360	10011001	
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
310.0	2.0										
	0.65435E-02		4900.00		0.00	5.0		Winter	0-360	10011001	
-1.											

0.64532E-02	4950.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.64089E-02	4975.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						
0.63651E-02	5000.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
310.0 2.0						



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

**SOIL WATER AIR PROTECTION ENTERPRISE**

2656 29th Street, Suite 201  
Santa Monica, California 90405  
Attn: Paul Rosenfeld, Ph.D.  
Mobil: (310) 795-2335  
Office: (310) 452-5555  
Fax: (310) 452-5550

Email: [prosenfeld@swape.com](mailto:prosenfeld@swape.com)

## ***Paul Rosenfeld, Ph.D.***

*Principal Environmental Chemist*

**Chemical Fate and Transport & Air Dispersion Modeling**

**Risk Assessment & Remediation Specialist**

### **Education**

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

### **Professional Experience**

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.



## **Professional History:**

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner  
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)  
UCLA School of Public Health; 2003 to 2006; Adjunct Professor  
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator  
UCLA Institute of the Environment, 2001-2002; Research Associate  
Komex H<sub>2</sub>O Science, 2001 to 2003; Senior Remediation Scientist  
National Groundwater Association, 2002-2004; Lecturer  
San Diego State University, 1999-2001; Adjunct Professor  
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager  
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager  
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor  
King County, Seattle, 1996 – 1999; Scientist  
James River Corp., Washington, 1995-96; Scientist  
Big Creek Lumber, Davenport, California, 1995; Scientist  
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist  
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## **Publications:**

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

**Rosenfeld, P.E.** & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

**Rosenfeld, P.E.**, J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

**Rosenfeld, P. E.**, M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.**, J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.**, and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49( 9), 171-178.

**Rosenfeld, P. E.**, Grey, M. A., Sellev, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

**Rosenfeld, P.E.**, Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS-6), Sacramento, CA Publication #442-02-008.

**Rosenfeld, P.E.**, and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

**Rosenfeld, P.E.**, and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

**Rosenfeld, P.E.**, C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

**Rosenfeld, P.E.**, and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

**Rosenfeld, P.E.**, and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

**Rosenfeld, P. E.** (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

**Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

**Rosenfeld, P. E.** (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

**Rosenfeld, P. E.** (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

**Rosenfeld, P. E.** (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

## **Presentations:**

**Rosenfeld, P.E.**, Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

**Rosenfeld, P.E.** (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

**Rosenfeld, P.E.** (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States” Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

**Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D.** (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D.** (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D.** (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E.,** Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E.** and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

**Rosenfeld. P.E.** (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E.** (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.,** and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.,** C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## **Deposition and/or Trial Testimony:**

In the United States District Court For The Southern District of Illinois

Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.

Case No.: 3:19-cv-00302-SMY-GCS

Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri

Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*.

Case No.: 1716-CV10006

Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey

Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.

Case No.: 2:17-cv-01624-ES-SCM

Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido” *Defendant*.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112<sup>th</sup> Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In United States District Court For The Southern District of Mississippi  
Guy Manuel vs. The BP Exploration et al., Defendants  
Case: No 1:19-cv-00315-RHW  
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles  
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC  
Case No.: LC102019 (c/w BC582154)  
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division  
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*  
Case Number: 4:16-cv-52-DMB-JVM  
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish  
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants  
Case No.: No. 13-2-03987-5  
Rosenfeld Deposition, February 2017  
Trial, March 2017

In The Superior Court of the State of California, County of Alameda  
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants  
Case No.: RG14711115  
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County  
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants  
Case No.: LALA002187  
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County  
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants  
Law No.: LALA105144 - Division A  
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County  
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants  
Law No.: LALA105144 - Division A  
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia  
Robert Andrews, et al. v. Antero, et al.  
Civil Action N0. 14-C-30000  
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico  
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward  
DeRuyter, Defendants  
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County  
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant  
Case No 4980  
Rosenfeld Deposition: May 2015





Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2656 29<sup>th</sup> Street, Suite 201  
Santa Monica, CA 90405

Matt Hagemann, P.G., C.Hg.  
(949) 887-9013  
[mhagemann@swape.com](mailto:mhagemann@swape.com)

**Matthew F. Hagemann, P.G., C.Hg., QSD, QSP**

**Geologic and Hydrogeologic Characterization  
Investigation and Remediation Strategies  
Litigation Support and Testifying Expert  
Industrial Stormwater Compliance  
CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014, 2017;
- Senior Environmental Analyst, Komex H<sub>2</sub>O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

#### **Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

#### **Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

### **Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

- Established national protocol for the peer review of scientific documents.

### **Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

### **Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

### **Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.**, 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F.**, 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F.**, 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F.**, and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F.**, 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F.**, 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F.**, and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F.**, Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F.**, Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F.**, 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.F.** and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F.**, 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

---

**Hagemann, M.F.**, 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.



# **EXHIBIT B**

## **Noise Analysis (Wilson Ihrig)**



WI #21-045

May 5, 2021

Mr. Richard Drury and Mr. Brian Flynn  
Lozeau | Drury LLP  
1939 Harrison Street, Suite 150  
Oakland, California 94612

**SUBJECT:** AC Marriott Hotel, Riverside CA, Comments on the Noise Analysis in the CatEx

Dear Mr. Drury and Mr. Flynn,

Per your request, we have reviewed the staff report and supporting documents for the AC Marriott Hotel and Residence Inn that would construct a 226 room hotel and convert a former fire station building into office spaces. We were specifically requested to examine the findings that concluded no significant noise or vibration impacts would occur with the project. The noise analysis in the staff report is supported by the Noise & Vibration Impact Analysis provided in Appendix D (Technical Report).

### Baseline Conditions Are Not Clearly Established

As noted in section 5.1 of the Technical Report, the baseline noise conditions were documented with a Type 2 sound level meter over a one hour period at each measurement location. The accuracy of such devices is, by definition,  $\pm 2$  dBA, and the text in section 5.1 should state this limitation of Type 2 equipment. Furthermore, any representation of the measured results (Table 5-1) indicating a tenth of a decibel is misleading and inaccurate. At best the results should be presented as whole integers to avoid misrepresentation of the measured data.

The Technical Report does not appear to discuss how the noise environment compares to the General Plan<sup>1</sup>, which uses 24-hour metrics such as the Day-night Level (Ldn) and the Community Noise Equivalent Level (CNEL), which do not relate directly to one-hour noise measurements. The Technical Report lacks any clear discussion of how those short-term measurements relate the corresponding noise or traffic patterns or to the Ldn/CNEL. One-hour represents only 4.2% of the total time in a 24-hour period. When documenting the baseline conditions, it can be essential to

---

<sup>1</sup> Accessed via the web on 4/25/21.

[https://riversideca.gov/cedd/sites/riversideca.gov.ceedd/files/pdf/planning/general-plan/10\\_Noise\\_Element\\_with%20maps.pdf](https://riversideca.gov/cedd/sites/riversideca.gov.ceedd/files/pdf/planning/general-plan/10_Noise_Element_with%20maps.pdf)

understand how the environment in question relates to the City's land use compatibility so that any permanent changes to the noise environment may be understood in that context.

Furthermore, urban noise is time-varying, and there are daily and hourly variations. The measurement data was collected between 3:20 and 4:20 PM on July 1, 2020, which can correspond to a busy commute traffic period, but this cannot be directly correlated to a 24-hour noise level in an urban environment where other noise sources contribute to the environment. July 2020 occurred during the COVID-19 pandemic which affected traffic in many areas of California, and there is no discussion in the traffic report (Appendix B) or in the Technical Report regarding this effect. If the traffic volume during a given measurement is 25% different from "typical" traffic volume during that time period, the noise measurement could be off by 1 dBA; combine this effect with the standard accuracy of a Type 2 sound level meter, and the measured results in Table 5-1 could be off the mark by as much as  $\pm 3$  dBA from "typical" traffic conditions.

### Thresholds of Significance are Not Properly Developed

None of the documents reviewed address noise impacts from operations. Section 4 of the Technical Report cites the applicable section of the CEQA Guidelines, Appendix G, which requires evaluation of whether a permanent increase in ambient noise would be generated by the project. Technical Report only addresses the potential for temporary noise increase from construction activities.

"Permanent" noise increases could be caused by street traffic or HVAC equipment. The documents contain no significance criterion and no analysis, and there is no mention as to why these are not included. Since it is likely that air-conditioning would be required at the hotel 24/7 during long periods of the year, this would appear to be a substantial omission. As noted in the architectural drawings (A2.05, A5.01, A5.02) there would be some HVAC and exhaust fans sited on the roof, with rooftop screens. In projects of this size, there could possibly be an emergency generator somewhere in the building that would require monthly testing. The documents do not provide any assurance that it would be possible to meet the Ordinance standards within historic/aesthetic constraints that can impede roof equipment placement due to the mission style slopes. The noise control aspects of the design to control HVAC and other operational sources are lacking from the project description narrative.

### Construction Activity

The Technical Report cites Caltrans, FTA and FHWA as references, but it does not use the noise data or the noise analysis method of these references. Instead, the analysis relies on noise measurements collected from similar projects, but limited information is provided on the "similar projects", and is not made clear how it was determined that the "similar projects" were suitable proxies. As noted above regarding the Type 2 instrumentation, the accuracy of such devices is  $\pm 2$  dBA, which could affect the environmental significance of some of the results. Furthermore, the distances used for construction assume that all construction equipment will be contained within the property. Nothing will be idling or staged on the street, apparently. Using a more conservative approach that follows the Caltrans/FTA method, there would be noise impact ( $> 80$  dBA Leq) at the Life Arts Center and the Congregational Church, and if any concrete trucks or cranes are staged on Lincoln Street, the noise impacts at the Church would be greater.

The Technical Report should explain in more detail why the reference noise level measurements are more accurate than those provided in the Caltrans/FTA/FHWA cited documents. The Caltrans/FTA/FHWA reference noise levels are more conservative<sup>2</sup>, with individual equipment showing about 6 to 15 dBA higher noise levels than what is shown in the Technical Report Table 7-1. Table 1 below shows some of these comparisons

**Table 1 Compare Technical Report Table 7-1 with Caltrans Reference Noise Levels**

Construction Stage	Reference Construction Activity ("Similar Projects")	Technical Report Reference Noise Level @ 50 Feet (dBA Leq) "Similar Projects"	Caltrans Reference Equipment	Caltrans Reference Noise Level @ 50 ft (dBA Leq)
Demolition	Demolition Activity	67.9	HoeRam	84
	Backhoe	64.2	Backhoe	76
	Water Truck Pass-By & Backup Alarm	71.9	Trucks	74
Site Preparation	Scraper, Water Truck, & Dozer Activity	75.3	Scraper	81
	Backhoe	64.2	(see above)	
	Water Truck Pass-By & Backup Alarm	71.9	(see above)	
Grading	Rough Grading Activities	73.5	Dozer	81
	Water Truck Pass-By & Backup Alarm	71.9	(see above)	
	Construction Vehicle Maintenance Activities	67.5	none	
Building Construction	Foundation Trenching	68.2	Excavator	81
	Framing	62.3	welder	70
	Concrete Mixer Backup Alarms & Air Brakes	71.6	Concrete Mixer	78
Paving	Concrete Mixer Truck Movements	71.2	Concrete Mixer	78
	Concrete Paver Activities	65.6	Paver	82
	Concrete Mixer Pour & Paving Activities	65.9	(see above)	
Architectural Coating	Air Compressors	65.2	Compressor	76
	Generator	64.9	Generator	79
	Crane	62.3	Crane, mobile	75

<sup>2</sup> Caltrans Technical Noise Supplement data which are also consistent with the noise data provided in the FHWA Roadway Construction Noise Model. Accessible via the web at <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>  
[https://www.fhwa.dot.gov/environment/noise/construction\\_noise/rcnm/](https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/)

The modeled noise levels in Table 7-2 also seem to incorporate some additional noise attenuation factors that are not obvious, and perhaps erroneous. Using the reference noise levels provided in Technical Report table 7-1 and distances reported in the Technical Report, Table 2 compares the results using a simple adjustment for distance only. As the Technical Report states it used the closest distances in the analysis, and Receptors R3 and R4 are the closest receptors, the Technical Report results at these locations should match most closely with this simple model. As can be seen from the results in the far right column, the simple geometric spreading results at R3 and R4 are higher than the results shown in the technical report. In fact, taking the “similar projects” noise data at face value (and ignoring the uncertainty of Type 2 equipment) the noise at R3 would approach and meet the significance threshold of 80 dBA (Leq), calling into question again, the reasons behind using noise data from “Similar projects” which are not adequately described in the Technical Report.

**Table 2 Compare Technical Report Table 7-2 (top) with Simple Geometric Spreading (middle) with Caltrans/FTA/FHWA method (bottom)**

Receiver Location 1	Construction Noise Levels (dBA Leq)						
	Demolition	Site Preparation	Grading	Construction Building	Paving	Architectural Coating	Highest Levels <sup>2</sup>
R1	62.3	65.7	63.9	62	61.6	55.6	65.7
R2	57.7	61.1	59.3	57.4	57	51	61.1
R3	68.3	71.7	69.9	68	67.6	61.6	71.7
R4	64.7	68.1	66.3	64.4	64	58	68.1
R5	59.5	62.9	61.1	59.2	58.8	52.8	62.9
<b>Simple Geometric Spreading</b>							
	Demolition	Site Preparation	Grading	Construction Building	Paving	Architectural Coating	Highest Level
R1	64	68	66	64	64	58	68
R2	59	63	61	59	59	53	63
R3	76	<b>80</b>	<b>78</b>	76	76	70	<b>80</b>
R4	70	73	71	69	69	63	73
R5	62	66	64	62	61	55	66
<b>Caltrans/FTA/FHWA Method with Simple Geometric Spreading</b>							
	Demolition	Site Preparation	Grading	Construction Building	Paving	Architectural Coating	Highest Level
R1	75	76	76	76	72	73	76
R2	70	71	71	71	67	68	71
R3	<b>87</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>84</b>	<b>85</b>	<b>88</b>
R4	<b>81</b>	<b>82</b>	<b>81</b>	<b>81</b>	77	<b>78</b>	<b>82</b>
R5	73	74	74	74	70	71	74
<b>Bold</b> entries approach 80 dBA Leq threshold; with a 2 dBA measurement uncertainty. <b>Red</b> entries exceed the 80 dBA threshold							

In fact, as shown above in Table 2, following the Caltrans/FTA analysis method with the Caltrans/FTA/FHWA reference data and combining the 3 highest pieces of equipment, all of the construction activities would meet or exceed the 80 dBA significance threshold at receptors R3, and most of the construction work would exceed the noise threshold at receptor R4. As mentioned previously, more explanation is required to justify the use of “similar projects” as the basis for the noise analysis.

The construction noise analysis does not include pile driving, but it is casually mentioned in the vibration analysis as a potential cause of vibration damage to structures (Section 7.6) The Project Description (page 3 of 3) indicates that caisson drilling will be the “preferred method” to construct the parking structure instead of pile driving, but it does not say outright that pile driving is excluded. The geotechnical report does not appear to indicate anything explicit about whether driven or friction piles are required, thus it is not clear to me how much the “preferred method” identified in the Project Description is wishful thinking. If it is still possible that impact driven piles could be required, then the Technical Report should be updated to include this analysis, as it would generate noise and vibration that exceeds the significance threshold.

### Conditions of Approval

The staff report includes a number of conditions that limit or control construction activities. It does not call out control of operational noise explicitly, and while Condition #30 requires the project to comply with “all applicable rules and regulations in effect at the time,” there is no clear assurance that compliance with all elements of the noise ordinance will be assessed during the permitting phase.

As mentioned above, it is not clear if impact/driven piles are conditionally excluded from the Project; if they cannot be excluded at this time, then designation of a CatEx is not appropriate, as impact/driven piles would generate a significant impact. The Caltrans reference level is 88 dBA Leq at 50 ft for noise, and their reference vibration for pile driving is 0.65 in/sec PPV at 25 ft.

### Conclusions

The baseline noise documentation in the Technical Report was poorly developed, and the one-hour measurements were not used to develop 24-hour noise metrics for comparison with the Riverside Noise Element which uses Ldn or CNEL metrics. This evaluation of land use compatibility can be important to determine whether future noise increase are significant. The Technical Report’s analysis of baseline conditions is therefore not supported by substantial evidence, and any discussion of permanent noise would be unsupported. The noise instrumentation is only accurate within  $\pm 2$  dBA, and combined with the possible variations in traffic volume and the presence of other noise sources, the extrapolation from these short-term measurements to a non-COVID-19 pandemic condition could be off by several decibels.

The Technical Report also lacks significance thresholds to evaluate operational (permanent noise); no analysis has been done to verify that the permanent condition would have no significant effect on the noise environment.

The construction noise analysis lacks sufficient data or explanation to account for the use of noise data from “similar projects” instead of the reference noise data and noise analysis method provided in the guidance documents from Caltrans, FTA and FHWA consulted for the significance criteria and


vibration equipment reference levels. The CadnaA noise model appears to make some substantial and unaccounted for adjustments to the noise calculations which do not comport with calculations using simple geometric spreading.

The analysis does not include noise or vibration from impact/driven piles. The Project description and Technical Report analysis should make it clear whether such activity is a possibility and thus should be included in the analyses.

Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG

  
Deborah A. Jue, INCE-USA  
Principal

ac marriott catex\_noise review\_wilson ihrig\_5.5.21.docx



T 510.836.4200  
F 510.836.4205

1939 Harrison Street, Ste. 150  
Oakland, CA 94612

www.lozeaudrury.com  
brian@lozeaudrury.com

## VIA EMAIL

August 16, 2021

Erin Edwards, Ward 1  
Clarissa Cervantes, Ward 2  
Ronaldo Fierro, Ward 3  
Chuck Conder, Ward 4  
Gaby Plascencia, Ward 5  
Jim Perry, Ward 6  
Steve Hemenway, Ward 7  
City Council  
City of Riverside  
3900 Main Street  
Riverside, CA 92522  
GPlascencia@riversideca.gov  
EEdwards@riversideca.gov  
CICervantes@riversideca.gov  
RFierro@riversideca.gov  
CCnder@riversideca.gov  
JPerry@riversideca.gov  
SHemenway@riversideca.gov

Brian Norton, Senior Planner  
City of Riverside  
Community and Economic Development Department  
Planning Division  
3900 Main Street, 3rd Floor  
bnorton@riversideca.gov

Donesia Gause, MMC  
City Clerk  
3900 Main Street, 7th Floor  
Riverside, CA 92522  
City\_Clerk@riversideca.gov

Re: **Supplemental CEQA Memo in Support of SAFER's Appeal of Planning Commission Decision to Exempt AC Marriott Project from CEQA; Case Nos. P19-0560, P19-0561, P19-0562, P19-0563**  
AGENDA ITEM 15 (City Council August 17, 2021 Meeting)

Dear Honorable Members of the Riverside City Council and Mr. Norton:

## INTRODUCTION

This supplemental CEQA memo is submitted on behalf of the Supporters Alliance for Environmental Responsibility ("SAFER") in support of their appeal concerning the CEQA exemption for the AC Marriott and Residence Inn hotel proposed to be constructed at 3420-3482 Mission Inn Avenue ("Project") to be heard as Agenda Item 15 at the City Council's August 17, 2021 meeting.

This memo supplements SAFER's two previous comment letters on this Project. SAFER's first comment letter was submitted to the Planning Commission on April 14, 2021 and



included an expert analysis of the Project's indoor air quality impacts by certified industrial hygienist Francis Offermann, who found that off-gassing of formaldehyde from products used in construction of the Project would result in a significant increased cancer risk to future hotel employees. The comment highlighted that the Project was not eligible for an exemption from CEQA due to the Project's significant indoor air quality impacts, inconsistencies with the general plan and zoning, and impacts on historical resources. The comment also noted that the variances required for the Project were unjustified. SAFER's first comment letter is found at pages 5 to 35 of the "Letters" pdf available in the Council's file at <https://riversideca.legistar.com/View.ashx?M=F&ID=9695803&GUID=75EB63B7-861F-4B53-B54B-97450ECB23E3>.

SAFER's second comment letter was submitted to the Land Use, Sustainability, and Resilience Committee on July 11, 2021 and included an expert analysis of the Project's impacts on historical resources by architectural historian Michael R. Corbett, who found that the Project is not consistent with the the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. The comment highlighted that the Project was not eligible for an exemption from CEQA due to the Project's potential significant impacts on historical resources. SAFER's second comment letter is found at pages 92 to 114 of the "Letters" pdf available in the Council's file at <https://riversideca.legistar.com/View.ashx?M=F&ID=9695803&GUID=75EB63B7-861F-4B53-B54B-97450ECB23E3>.

This memo includes the expert analysis of air quality experts Matt Hagemann, P.G., C.Hg., and Paul E. Rosenfeld, Ph.D., of Soil/Water/Air Protection Enterprise ("SWAPE"), attached as Exhibit A, and noise expert Deborah A. Jue of Wilson Ihrig, attached as Exhibit B. SWAPE found that the Project would result in significant emissions of VOCs and NOx as well as significant impacts to human health from emissions of diesel particulate matter. Wilson Ihrig found that the construction noise from the Project would exceed applicable significance thresholds. Due to the Project's significant air quality and noise impacts, in addition to the impacts identified in SAFER's previous comment letters, the Project cannot be exempt from CEQA review under CEQA's Infill Exemption. Instead, an environmental impact report or negative declaration must be prepared prior to Project approval.

## DISCUSSION

### **I. THE PROJECT DOES NOT QUALIFY FOR CEQA'S INFILL EXEMPTION BECAUSE THE PROJECT WILL RESULT IN SIGNIFICANT AIR QUALITY IMPACTS.**

A project cannot qualify for CEQA's Infill Exemption if the project results in significant impacts to air quality. (14 CCR 15332(d).) Matt Hagemann, P.G., C.Hg., and Dr. Paul E. Rosenfeld, Ph.D., of the environmental consulting firm SWAPE reviewed the air quality analysis prepared for the Project and found that it failed to disclose the true extent of the Project's impacts. SWAPE's analysis is attached as Exhibit A. As discussed below, SWAPE concluded

that the Project would result in significant emissions of volatile organic compounds ("VOCs"), nitrogen oxides ("NOx"), and diesel particulate matter ("DPM"). Due to these significant air quality impacts, the Project cannot be exempted from CEQA under the Infill Exemption.

**A. The Project will result in significant emissions of VOCs and NOx.**

SWAPE found that the Project's air quality analysis underestimated the Project's emissions and therefore cannot be relied upon to determine the significance of the Project's impacts. (Ex. A, p. 2.) The air quality analysis relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2016.3.2 ("CalEEMod"). (*Id.*) This model, which is used to generate a project's construction and operational emissions, relies on recommended default values based on site specific information related to a number of factors (*Id.*) CEQA requires that any changes to the default values must be justified by substantial evidence. (*Id.*)

SWAPE reviewed the Project's CalEEMod output files and found that the values input into the model were inconsistent with information provided by City staff. (Ex. A, p. 2.) This results in an underestimation of the Project's emissions. (*Id.*)

Specifically, SWAPE found that the following values used in the Project's air quality analysis were either inconsistent with available information about the Project or otherwise unjustified:

1. Underestimated Land Use Size (Ex. A, pp. 2-3.)
2. Failure to Model All Proposed Land Uses (Ex. A, pp. 3-4.)
3. Unsubstantiated Changes to Construction Phase Lengths (Ex. A, pp. 4-6.)
4. Improper Application of Operational Mitigation Measures (Ex. A, pp. 6-9.)

As a result of these errors, the Project's air quality analysis underestimates the Project's construction and operational emissions and cannot be relied upon to determine the significance of the Project's air quality impacts.

In an effort to accurately determine the proposed Project's construction and operational emissions, SWAPE prepared an updated CalEEMod model that includes more site-specific information and correct input parameters. (Ex. A, p. 9.) SWAPE's updated analysis corrected the land use types and sizes; omitted the unsubstantiated changes to the individual construction phase lengths; and excluded the unsubstantiated operational mitigation measures. SWAPE's updated analysis found that the Project's construction-related VOC and NOx emissions exceed the significance thresholds of 75- and 100-pounds per day ("lbs/day") set by the South Coast Air Quality Management District ("SCAQMD"). (*Id.*)

Model	VOC	NOX
Staff Report Construction	71.26	29.44
SWAPE Construction	324.65	176.95
% Increase	356%	501%
<b>SCAQMD Regional Threshold (lbs/day)</b>	<b>75</b>	<b>100</b>
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>

SWAPE's updated model demonstrates that the Project would result in a significant air quality impact that was not previously identified or addressed. Due to this significant air quality impact, the Project cannot be exempted from CEQA under the Infill Exemption.

**B. The Project will result in significant impacts to human health from emissions of diesel particulate matter.**

The Project's air quality analysis concluded that the Project's impact on human health would be less than significant despite the fact that the analysis failed to include a quantified health risk analysis ("HRA"). (Ex. A, p. 10.) As SWAPE noted, the analysis failed "to quantitatively evaluate the Project's construction-related and operational TAC [toxic air contaminant] emissions or make a reasonable effort to connect these emissions to potential health risk impacts posed to nearby existing sensitive receptors or indicate the concentrations at which such pollutants would trigger adverse health effects." (*Id.*) As such, it failed to make "a reasonable effort to connect the Project's construction-related and operational TAC emissions to the potential health risks posed to nearby receptors." (*Id.* at p. 11.)

Additionally, the failure to provide a quantified HRA is inconsistent with the most recent guidance of the State Office of Environmental Health Hazard Assessment ("OEHHA"). (Ex. A, p. 11.) OEHHA recommends that all short-term projects lasting at least two months (e.g. Project construction) be evaluated for cancer risks to nearby sensitive receptors. (*Id.*) OEHHA also recommends that exposure from projects lasting more than 6 months (e.g. the Project's future years of operation) be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR"). (*Id.*)

Lastly, by failing to provide a quantified HRA for the Project, the analysis failed to compare the Project's excess health risk impact to the applicable SCAQMD threshold of 10 in one million and therefore lacked evidence to support the conclusion that the health risk would be under the threshold. (Ex. A, p. 11.)

SWAPE prepared a screening-level HRA to evaluate potential impacts to human health from diesel particulate matter emissions ("DPM") during construction and operation of the Project. (Ex. A, pp. 12-15.) SWAPE used AERSCREEN, the leading screening-level air quality dispersion model. (*Id.* at p. 12.) SWAPE used a sensitive receptor distance of 100 meters and

analyzed impacts to individuals at different stages of life based on OEHHA guidance. (*Id.* at pp. 13-14.)

SWAPE found that the excess cancer risk for children and infants, at the closest sensitive receptor located approximately 100 meters away, over the course of Project construction and operation, are approximately 47 and 43 in one million, respectively. (Ex. A, p. 14.) Moreover, SWAPE found that the excess cancer risk over the course of a residential lifetime is approximately 98 in one million. (*Id.*) Thus, the infant, child, and lifetime cancer risks all exceed the SCAQMD threshold of 10 in one million. Due to this significant air quality impact, the Project cannot be exempted from CEQA under the Infill Exemption.

## **II. The Project does not qualify for CEQA's Infill Exemption because the Project will result in significant noise impacts.**

A project cannot qualify for CEQA's Infill Exemption if the project results in significant noise impacts. (14 CCR 15332(d).) Noise expert Deborah A. Jue of Wilson Ihrig reviewed the Project's noise analysis and found that it failed to adequately disclose the extent of the Project's noise impacts. Wilson Ihrig's comment is attached as Exhibit B. As discussed below, Wilson Ihrig concluded that the Project's noise analysis (1) failed to utilize proper metrics to compare the Project's noise impacts to the City's General Plan, (2) failed to address the Project's permanent increase in ambient noise, (3) improperly relied on data from "similar projects" instead of conducting an analysis in accordance with Caltrans, Federal Transit Administration ("FTA") and Federal Highway Administration ("FHWA") guidance, and (4) failed to include noise and vibration impacts of impact/driven piles. Wilson Ihrig found that, when proper methodology was applied, the Project's noise would exceed applicable significance thresholds. Due to the Project's significant noise impacts, the Project cannot be exempted from CEQA under the Infill Exemption.

First, Wilson Ihrig found that the Project's noise analysis failed to clearly establish existing baseline conditions at the Project site. (Ex. B, p. 1.) The analysis relied on one-hour measurements taken with a sound level meter without acknowledging the limited accuracy of such instruments. (*Id.*) The analysis did not convert the decibel measurements of the sound meters into metrics that could be compared to the City's General Plan, which relies on Day-night Level (Ldn) and the Community Noise Equivalent Level (CNEL). In addition, the measurements were taken between 3:20 and 4:20 PM on July 1, 2020, which, as Wilson Ihrig explained, "can correspond to a busy commute traffic period, but this cannot be directly correlated to a 24-hour noise level in an urban environment where other noise sources contribute to the environment." (*Id.*)

Second, Wilson Ihrig found that, although the Project's noise analysis addressed temporary noise increases from construction activities, there was no analysis of the Project's permanent increase in ambient noise as required by Appendix G of the CEQA Guidelines. (Ex. B (p. 2.)) The omission of any analysis of the Project's increase to ambient noise means that any noise impacts related to HVAC systems, exhaust fans, and emergency generators has gone

unaddressed. (*Id.*)

Third, Wilson Ihrig found that, using the recommended methodology from Caltrans and FTA, "there would be noise impact ( $> 80$  dBA Leq) at the Life Arts Center and the Congregational Church, and if any concrete trucks or cranes are staged on Lincoln Street, the noise impacts at the Church would be greater." (Ex. B, p. 2.) However, instead of using the methodology recommended by Caltrans, FTA, and FHWA, the Project's noise analysis relied on noise analyses prepared for "similar projects," yet did not provide details about those "similar projects." (*Id.*) By applying geometric spreading to the noise levels for the "similar projects," Wilson Ihrig found that the Project would meet the 80 dBA significance threshold for noise and, given the  $\pm 2$  dBA accuracy of the sound meters, could likely exceed the threshold. (*Id.*) Using the methodology recommended by Caltrans, FTA, and FHWA with simple geometric spreading (rather than the "similar projects" methodology), Wilson Ihrig found that the Project would exceed the the 80 dBA significance threshold for noise, which disqualifies the Project from CEQA's Infill Exemption.

Lastly, noise from pile driving was not included in the Project's noise analysis, even though it does not appear that pile driving is explicitly prohibited for construction of the Project. (Ex. B, p. 5.) Without an express condition prohibiting pile driving, the Project will result in significant noise impacts that have not been disclosed. (*Id.*) If pile driving is allowed to occur, the noise will exceed significance thresholds and thereby disqualify the Project from CEQA's Infill Exemption. (*Id.*)

## CONCLUSION

As discussed above, the Project will result in significant impacts to air quality and noise. As explained in SAFER's previous comments, the Project will result in significant impacts to historical resources and indoor air quality. For those reasons, the Project does not qualify for CEQA's Infill Exemption or Historic Resource Restoration/Rehabilitation Exemption. SAFER is not opposed to the Project *per se* but believes that the Project must undergo environmental review pursuant to CEQA prior to approval. As such, SAFER respectfully requests that the City Council grant SAFER's appeal to ensure that an environmental impact report or negative declaration is prepared for the Project.

Sincerely,



Brian B. Flynn  
Lozeau Drury LLP

Date: 8-17-21  
Item No.: 15

---

**From:** Adler, Anthony <[AAA@msk.com](mailto:AAA@msk.com)>  
**Sent:** Monday, August 16, 2021 5:00 PM  
**To:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>  
**Subject:** [External] Agenda Item #15

Dear Riverside Council Members:

Please vote NO on agenda item #15. The proposed hotels are too tall and too unattractive and out of character with the surrounding properties – particularly given that the developer intends to have no setbacks from the Street. Thank you for your consideration.

**Anthony A. Adler**  
T: 310.312.3186 | [aaa@msk.com](mailto:aaa@msk.com)

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21  
Item No.: 15

From: Dex Alexander <dex@blackroses.com>  
Sent: Tuesday, August 17, 2021 8:29 AM  
To: Norton, Brian <BNorton@riversideca.gov>  
Subject: [External] Proposed Marriot AC in Downtown Riverside

Mr. Norton,

I am writing to urge your support for the Marriot AC proposal as submitted.

I am Dex Alexander, managing partner at Black Roses, a brand management and experience agency located walking distance from the proposed hotel site. While I love Riverside's commitment to historical landmarks and preservation, maintaining such a stance while impeding progress is harmful to local businesses and the growth of our city.

Riverside faces many challenges, one of the biggest being the ongoing sense that we're a pass-thru town on the way to Palm Springs or L.A. This sense is exacerbated by the reality that proposals like this one, in partnership with a global brand like Marriot and incorporating existing architectural design, would face such opposition.

Please move this process forward so that this and other forward thinking ideas can find a place in downtown. We need it.

Dex Alexander  
Black Roses  
(951) 452-6477

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21

Item No.: 15

**From:** Elizabeth Ayala <[elizabeth.ayala@gmail.com](mailto:elizabeth.ayala@gmail.com)>

**Sent:** Monday, August 16, 2021 4:26:09 PM

**To:** Plascencia, Gaby <[GPlascencia@riversideca.gov](mailto:GPlascencia@riversideca.gov)>; Cervantes, Clarissa <[ClCervantes@riversideca.gov](mailto:ClCervantes@riversideca.gov)>

**Subject:** [External] Item #15 - re: AC Marriott in downtown

good afternoon Councilwomen Plascencia & Cervantes,

I am very concerned that the TWO hotels at Lemon & Mission Inn Avenue are being given a blank check to build a massive amount of rooms with so many variances from current zoning code.

These variances include:

Height - the developers want to build beyond what the current limits are.

Sidewalk set back - reducing the setback from 15 feet to one

Parking - instead of providing one parking spot per room, they want to provide for just half of the 226 rooms

Not conducting an Env. Impact Report

I am not against development in downtown. I understand the city wants to create more rooms to make the convention center more attractive. However I think the parking will particularly become disastrous.

I already find it difficult to park at my church on Sundays during the Festival of Lights, even when it was "reduced" last winter. I do not want to experience that all year round. Additionally, as a member of First Congregational Church in downtown I am worried that construction 6 days a week will ruin our church's chances of hosting weddings which are sought after in the community.

Please reconsider giving the developers a blank check.

Thank you,  
Elizabeth

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director



Date: 8-17-21  
Item No.: 15

From: Rhonda Chatham <rhondachatham32@gmail.com>  
Sent: Monday, August 16, 2021 8:18 AM  
To: CityClerkMbx <City\_Clerk@riversideca.gov>  
Subject: [External] New hotel

Lovely! Thank you. This project is a welcome upgrade to downtown! Can not wait until I can spend the holidays there!  
Go Riverside!

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21  
Item No.: 15

---

**From:** Alan Curl <[alan.curl@yahoo.com](mailto:alan.curl@yahoo.com)>  
**Sent:** Tuesday, August 17, 2021 8:20 AM  
**To:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>  
**Subject:** [External] Proposed Hotel on Mission Inn Avenue

It appears that something of a bait-and-switch has occurred. The City accepted a proposal for a hotel within acceptable height limits and an acceptable set-back from the street. The developer now seeks to build a hotel with greater footprint and a height that will obscure public appreciation of nearby historic architecture. I encourage the City Council to just say "no". The developer may then wish to withdraw its proposal, but the City will have made clear that its values -- relative to the integrity of the Mission Inn Historic District and its downtown planning documents -- are firm.

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21  
Item No.: 15

---

**From:** Charlotte Davidson <[charsnet@aol.com](mailto:charsnet@aol.com)>  
**Sent:** Monday, August 16, 2021 5:11 PM  
**To:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>  
**Subject:** [External] Vote NO on Agenda Item #15

Dear City Council Members:

As a third generation Riversider, I have seen the City take many wonderful decisions including preservation of the Green Belt and Victoria Avenue, and refurbishment of many lovely buildings of historic downtown Riverside. I have also seen big, tall mistakes - Mr Rubidoux Manner and the old Security Pacific Building, as two examples. More recently, the City has added two new hotels, the Hampton Inn and the Hyatt Place. All of these buildings are eyesores.

The new Marriott Residences and AC - the bottom rung of the Marriott portfolio - do not add anything to historic downtown Riverside. They are too tall by at least three stories and the lack of set back makes them look important when in fact, they are simply ugly buildings.

Please, as Riverside bills itself as "the City of Arts and Innovation," let us find an architect (local and not from OC) who can innovate an artistic, beautiful and fitting structure not another gussied up Motel 6.

Vote NO on Agenda item #15.

Charlotte Davidson  
Ward 1

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 08-17-2021

Item No. 15

**From:** Laurie Haessly <[lauriehaessly@gmail.com](mailto:lauriehaessly@gmail.com)>

**Sent:** Monday, August 16, 2021 4:53 PM

**To:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>

**Cc:** eedwards@riversideca

**Subject:** [External] August 17 City Council Agenda Item 15

Dear City Clerk,

I am writing to you and the City Council to voice my concerns regarding the August 17, 2021 City Council Agenda Item 15, below.

Please VOTE NO and DO NOT allow any and all variance(s) from the current zoning laws.

I am in support of historic preservation. Particularly in the downtown Riverside area.

'The proposal calls for TWO HOTELS with 226 rooms – more than the Mission Inn – on a quarter of a city block. The developers are asking the City for three variances from current zoning laws: Height (it will be 8 stories tall, blocking out the First Congregational Church bell tower); set-back (rather than a 15-foot setback, they want a ONE FOOT SETBACK – right on the sidewalk); and parking (rather than the required one parking space per room, the developer wants to provide parking spaces for only half the proposed rooms). Moreover, only the façade of the former fire station is proposed to be retained. This project will be on the portion of Mission Inn Avenue that also features the First Congregational Church, the Municipal Auditorium, the Riverside Art Museum, the Universalist Unitarian Church, the Museum of Riverside, the Old City Hall, and the Mission Inn – all City landmarks and several National Historic Landmarks.'

Thank you,

Laurie Haessly  
Downtown Resident since 1986  
4579 9th Street  
Riverside 92501  
951.288.1920

Sent from my iPhone

cc Mayor  
City Council  
City Manager  
City Attorney  
ACM's  
C&ED Director

Date: 8-17-21  
Item No.: 15

**From:** Nate Haessly <[natehaessly@gmail.com](mailto:natehaessly@gmail.com)>  
**Sent:** Monday, August 16, 2021 5:33 PM  
**To:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>  
**Cc:** Edwards, Erin <[EEdwards@riversideca.gov](mailto:EEdwards@riversideca.gov)>  
**Subject:** [External] August 17 City Council Agenda Item 15

Dear City Clerk,

I am writing to you and the City Council to voice my concerns regarding the August 17, 2021 City Council Agenda Item 15, below.

Please VOTE NO and DO NOT allow any and all variance(s) from the current zoning laws.

I am in support of historic preservation. Particularly in the downtown Riverside area.

'The proposal calls for TWO HOTELS with 226 rooms – more than the Mission Inn – on a quarter of a city block. The developers are asking the City for three variances from current zoning laws: Height (it will be 8 stories tall, blocking out the First Congregational Church bell tower); set-back (rather than a 15-foot setback, they want a ONE FOOT SETBACK – right on the sidewalk); and parking (rather than the required one parking space per room, the developer wants to provide parking spaces for only half the proposed rooms). Moreover, only the façade of the former fire station is proposed to be retained. This project will be on the portion of Mission Inn Avenue that also features the First Congregational Church, the Municipal Auditorium, the Riverside Art Museum, the Universalist Unitarian Church, the Museum of Riverside, the Old City Hall, and the Mission Inn – all City landmarks and several National Historic Landmarks.'

Thank you,

Nathan Haessly  
4579 9th Street  
Riverside 92501  
951.850.8427

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21  
Item No.: 15

August 16, 2021

**VIA E-MAIL** [city\_clerk@riversideca.gov]

Riverside City Council  
3900 Main Street  
Riverside, CA 92522

Re: Appeal of Planning Commission's Approval of Environmental Determination, Conditional Use Permit, and Variances (P19-0560, P19-0561, P19-0562) and Appeal of Certificate of Appropriateness (P19-0563) for Proposed Development at 3420-3482 Mission Inn Avenue; August 17, 2021 City Council Agenda, Item No. 15

Dear Mayor and City Councilmembers:

This letter is sent on behalf of Mission District Associates, LLC and the Mission Inn Hotel & Spa ("Mission Inn"), which has operated in downtown Riverside since 1876. As both a National Historic Landmark and longtime member of the business community, the Mission Inn has a particular interest in the responsible redevelopment of the historic downtown area and the preservation of other historic buildings in the area. While the Mission Inn is not opposed, in principle, to the development of a hotel at 3420-3482 Mission Inn Avenue ("Site"), it is very disappointing to see the applicant has abandoned its original proposal for a 161-room hotel that would have properly preserved the historic Downtown Fire Station ("Historic Station") by incorporating it into the design of the new hotel. The dual branded 226-room project ("Project") proposed in its place is too large for the 0.95 acre Site, incompatible with its surroundings, and fails to preserve any of the interior features of the Historic Station.

Moreover, as explained further below and in the attached expert reports, the Project requires variances and conditional use permits that cannot be legally approved, and does not qualify for an exemption from the California Environmental Quality Act ("CEQA"). The Mission Inn thus joins its neighbors and many Riverside residents in urging the City Council to reject the Project, as currently configured, and send it back to the drawing board.<sup>1</sup>

---

<sup>1</sup> We hereby incorporate by reference into the administrative record for this proceeding all agendas, staff reports, transcripts, minutes, and videos, of any public hearing concerning the Site or the Project as well as any and all public records concerning the Site or the Project.

Riverside City Council  
August 16, 2021  
Page 2

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

**I. The City May Not Approve the Project Without Complying With CEQA**

- A. The Project does not qualify for the Class 32 infill exemption, because it requires variances.

CEQA requires that public agencies analyze whether a project might have any significant environmental impacts before granting any approval of such a project, unless the project is clearly shown to be “exempt” from CEQA. (CEQA Guidelines, § 15004(a).) While the CEQA Guidelines set forth exemptions for several categories of projects that have been determined not to have a significant impacts on the environment, such “categorical exemptions” “are construed narrowly,” in keeping with the requirement that CEQA “be interpreted in such manner as to afford the fullest possible protection to the environment.” (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 943-944, 966.) Further, a categorical exemption may **not** be relied upon where there is a reasonable possibility that an otherwise exempt project will have a significant effect on the environment, due to unusual circumstances. (CEQA Guidelines, § 15300.2(c).)

Here, the Planning Commission found the Project was categorically exempt from CEQA under Section 15332 of the CEQA Guidelines, which provides an exemption from CEQA for certain infill development projects that satisfy various specified conditions. Under the express terms of that exemption, however, a public agency may rely on Section 15332 only where, among other things, a project is shown to be “**consistent with** the applicable general plan designation and all applicable general plan policies as well as with **applicable zoning designations and regulations.**” (CEQA Guidelines, § 15332, *emph. added.*)

The Project cannot rely on the Class 32 exemption, because it indisputably will not comply with applicable zoning regulations related to setbacks and parking. Instead, the Project is seeking substantial variances from those regulations. The City’s position—as explained during the Land Use, Sustainability, and Resilience Committee meeting—is apparently that a project that requires a variance from zoning standards is not “inconsistent” with the City’s zoning regulations, because the City’s Code allows for variances. That position, however, is clearly inconsistent with the law. (*See Wollmer v. City of Berkeley* (2011) 193 Cal.App.4th 1329.)

*Wollmer v. City of Berkeley* involved an affordable housing project on a 0.79 acre site in the City of Berkeley. (*Id.* at 1335-36.) Because it was an affordable housing project, the project was statutorily entitled to a density bonus, along with a waiver or reduction of development standards that would prevent construction of the development. (*Id.* at 1346.) In finding that the city’s application of certain reduced development standards did not preclude application of the Class 32 exemption, the Court of Appeal explained:

On its face the exemption only requires consistency with applicable general plan designations and policies and applicable zoning designations and regulations. (Guidelines, § 15332, subd. (a).) The

Riverside City Council  
August 16, 2021  
Page 3

density bonus statute in turn ***requires a waiver of development standards*** that physically preclude construction of a density-bonus qualifying project. (§ 65915, subd. (e)(1).) And the City’s own zoning ordinance generally requires the grant of a density bonus upon a complete application. (Berkeley Mun. Code, § 23C.12.050.A.) ***Taking these laws together as they operate in the context of a density bonus project, it is clear that the waived zoning standards are not “applicable”*** and that the requirements of Guidelines section 15332, subdivision (a) were met.

(*Id.* at 1348-1349 [agreeing with the city’s argument that “development standards which it waived pursuant to [the Density Bonus Law] were not ‘applicable’ to the project within the meaning of Guidelines section 15332, subdivision (a) because [the Density Bonus Law] renders these standards inapplicable in order to allow the density bonus”].) Thus, in holding that development standards a city is required to waive are not “applicable” to a project for purposes of the Class 32 exemption, the *Wollmer* court made clear the result would be different if such waiver was not required, *i.e.*, a project that requires a discretionary variance cannot qualify for the exemption.

Moreover, any other interpretation would make the requirement that a project be consistent with “applicable zoning designations and regulations” utterly meaningless. A city obviously cannot approve a project that is inconsistent with its zoning standards without a variance. The City’s requirement would thus reduce the requirement that a project be “consistent with . . . applicable zoning . . . regulations” to a nonsensical condition that a City merely have the authority to approve the project under its zoning code. Likewise, if the City’s interpretation were correct, then the City could apply the Class 32 exemption to a project that requires a zone change, since the City’s zoning code allows such changes. This is clearly not what is intended by the Class 32 exemption. Accordingly, as a matter of law, the City cannot rely on the Class 32 exemption to approve a project that requires a zone change, and the City cannot approve the Project without complying with CEQA.

B. The Project does not qualify for the Class 32 exemption, because of its impacts.

Moreover, even if the Project did not require multiple variances, it would not qualify for the Class 32 exemption for several other reasons. As explained in the attached letter from Nicole Criste, Terra Nova Planning and Research, Inc. (attached hereto as Exhibit A), the traffic and noise analyses prepared for the Project are insufficient to demonstrate that the Project will not have impacts related to construction traffic and/or noise/vibration. The City thus has not established the Project will not have impacts related to traffic and noise, as required in order to rely on the Class 32 exemption.

Furthermore, CEQA expressly provides that categorical exemptions may not be applied to “[a] project that may cause a substantial adverse change in the significance of a historical



Riverside City Council  
August 16, 2021  
Page 4

resource.” (Pub. Res. Code § 21084(e).) The City has relied upon a Historic Resource Evaluation Assessment Report prepared by George Taylor Loudon (“Louden Report”) to argue that the Project will not significantly impact any historical resources. As set forth in detail in the attached memorandum from Jenna Snow (“Snow Report”),<sup>2</sup> however, the Loudon Report is deficient in numerous respects. As explained by Ms. Snow, the Project fails to even attempt to preserve significant historical features of the interior of the Central Fire Station, which is listed in the California Register of Historical Resources. (Snow Report, p. 7.) Further, the Project will adversely impact other historical resources surrounding the Project site. (Snow Report, pp. 8-10.) Even if the City disagrees with Ms. Snow’s analysis, her expert opinion nonetheless constitutes substantial evidence of an significant impact to historical resources that precludes reliance on a categorical exemption and requires an environmental impact report be prepared. (See Pub. Res. Code § 21084.1; *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1072 [“once the resource has been determined to be an historical resource, then the fair argument standard applies to the question whether the proposed project ‘may cause a substantial adverse change in the significance of an historical resource’ (§ 21084.1) and thereby have a significant effect on the environment”].) For this reason, as well, the City cannot rely on a categorical exemption to approve the Project.

Reliance on the Infill Exemption is similarly precluded by the “unusual circumstances” exemption, which prohibits use an exemption where a project may have significant impacts due to an unusual circumstance. (CEQA Guidelines § 15300.2(c).) The facts that: (1) the Site includes a historical resource; and (2) the Site is surrounded by other historical resources certainly constitute unusual circumstances and differentiate the Project from other infill development that may fall within the Class 32 exemption. Thus, any potential impact related to those circumstances disqualifies the Project from reliance on an exemption. (CEQA Guidelines § 15300.2(c).)

Further, as both Ms. Criste and Ms. Snow point out in their reports, the City’s consultants have proposed “mitigation” for significant environmental impacts related to noise and historical resources. The City cannot lawfully rely on an exemption when a project results in significant impacts requiring mitigation, as is the case here. (*Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1200; *Salmon Protection & Watershed Network v. County of Marin* (2004) 125 Cal.App.4th 1098, 1102.)

## **II. The Project Does Not Qualify for a Variance.**

Variances from the terms of the zoning ordinances shall be granted ***only*** when because of ***special circumstances*** applicable to the property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance ***deprives such property of privileges***

---

<sup>2</sup> Ms. Snow is a historic preservation consultant who meets the Secretary of the Interior’s Professional Qualification Standards. Her letter report, including her experience and qualifications, is attached hereto as Exhibit B.

Riverside City Council  
August 16, 2021  
Page 5

*enjoyed by other property in the vicinity* and under identical zoning classification.” (Gov. Code § 65906, *emph. added.*)<sup>3</sup> Moreover, such findings must be supported by substantial evidence and must “bridge the analytic gap between the raw evidence and ultimate decision or order.” (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal. 3d 506, 515 [overturning grant of variance where city failed to make adequate findings supporting its issuance].) Such circumstances are not present here, and thus, granting the requested variances would not be proper.

The Site’s size, shape, topography, location, and surroundings do not vary substantially from those of other parcels in the same zoning district or vicinity such that special circumstances exist. As noted by Ms. Criste in her report:

[T]he proposed project site is rectangular in size, and is consistent in size and shape with all surrounding parcels in the area, as shown on page 1 of the Planning Commission staff report of April 15 (staff report). The site is flat, and neither its location or surroundings create a circumstance where the project could not comply with zoning standards. There is nothing “unique” about the site in the context of the downtown area, and the site is typical of the urban environment in this part of Riverside. (Criste Report, p. 2.)

The Findings state that the inability to acquire additional land and the Project’s location in historic districts are both special circumstances that prevent the Project from implementing the front setback requirement, because they might result in fewer hotel rooms.<sup>4</sup> As noted by Ms. Criste:

This is neither appropriate justification nor germane to a variance Finding. The property is entirely consistent in shape, size and context with its neighbors. It is an urban block that is regulated by the urban standards established in the [Downtown] Specific Plan. That Plan explicitly aims to create a vibrant environment that encourages pedestrian activity, and requires the 15 foot setback on Mission Inn Avenue to bring consistent urban fabric to this historic sub-district. The loss of a few hotel rooms is not a special circumstance, and is not adequate justification for the City to support the variance. (Criste Report, p. 3.)

---

<sup>3</sup> As set forth in Ms. Criste’s letter, the variance findings in the City’s Zoning Code, Section 19.720.040 are more lenient than those required by the State Planning & Zoning Law, Government Code Section 65906. To the extent the local provisions conflict with state law, they are preempted and invalid. (Longin’s California Land Use § 1.72 [“local governments may not adopt ordinances that conflict with the state Planning and Zoning Law (Gov.C 65000 *et seq.*)”].)

<sup>4</sup> References herein to the “Findings” are to the Findings adopted by the Planning Commission at its April 15, 2021 hearing on the Project.

Riverside City Council  
August 16, 2021  
Page 6

Courts have overturned an agency's granting of a variance in similar circumstances when there has been no showing that a property differs substantially from other parcels in the zoning district. (*Topanga*, *supra*, 11 Cal.3d at 522; *Orinda Assn. v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1166; *PMI Mortgage Ins. Co. v. City of Pacific Grove* (1981) 128 Cal.App.3d 724, 731.)

Because the Site is consistent with its neighbors, the City cannot find that without the variances, the Project applicant would be denied the privileges that are enjoyed by other property owners in the vicinity. As noted by the Court of Appeal in *Orinda Assn.*, *supra*, 186 Cal.App.3d at 1166, “***the desirability of the proposed development***, the attractiveness of its design, the benefits to the community, ***or the economic difficulties of developing the property in conformance with the zoning regulations, lack legal significance*** and are simply irrelevant to the controlling issue of whether strict application of zoning rules would prevent the would-be developer from utilizing his or her property to the same extent as other property owners in the same zoning district.” (emph. added.)<sup>5</sup>

The applicant entered into a contract with the City to purchase the property for a 161-room hotel in 2018. The applicant knew or should have known of the key limitations on development, including the front setbacks and parking requirements. Now, the applicant is proposing a 226-room hotel and claiming the increased size justifies substantial variances from the setback and parking requirements. (See Finding No. 1 [purporting to justify the variance on the grounds that increasing the front setback would result in “reduction of guest rooms” and “loss of building footprint” and adding additional parking would “result[] in a reduction in the amount of guest rooms . . .”].)<sup>6</sup> Financial or self-induced hardship, as is the case here, is not a sufficient basis on which to grant a variance. (See, e.g., Riverside Zoning Code [“RZC”] § 19.720.020(C); *Broadway, Laguna, Valley Association*, *supra*; *San Marino v. Roman Catholic Archbishop* (1960) 180 Cal.App.2d 657; *Minney v. Azusa* (1958) 164 Cal.App.2d 12; and *Town of Atherton v. Templeton* (1961) 198 Cal.App.2d 146.)

Contrary to state law, the proposed variances would grant the Project applicant special privileges that are inconsistent with the restrictions placed on other parcels in the same zoning district or vicinity. (Gov. Code § 65906 [“Any variance granted shall be subject to such conditions as will assure that the adjustment thereby authorized shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such property is situated.”].)

---

<sup>5</sup> (*Accord*, *Broadway, Laguna, Valley Association v. Board of Permit Appeals* (1967) 66 Cal.2d 767, 775; *Hamilton v. Board of Supervisors of Santa Barbara County* (1969) 269 Cal.App.2d 64, 67; and *Stolman v. City of Los Angeles* (2003) 114 Cal.App.4th 916, 926.)

<sup>6</sup> The Findings even purport to assail the integrity of the setback requirement itself, arguing in a nonsensical manner that a variance is needed because the 15 foot front yard setback “is contrary to the desired character and unique sense of identity” for the Raincross District. (Finding 2.)

Riverside City Council  
August 16, 2021  
Page 7

### **III. The Conditional Use Permit Findings Are Legally Inadequate.**

#### **A. The Findings Do Not Contain Any Evidence To Support Issuance of a Conditional Use Permit for the Hotel.**

The Findings purporting to grant the Conditional Use Permit merely repeat the findings contained in RZC Section 19.760.040 required for a use permit. There is no analysis whatsoever as to how granting a use permit for the hotel is consistent with these findings. The Findings are not supported by any evidence, let alone substantial evidence, as is required.<sup>7</sup> (Code of Civil Procedure § 1094.5(b) [court reviews land use decisions for abuse of discretion; “[a]buse of discretion is established if . . . the order or decision is not supported by the findings, or the findings are not supported by the evidence.”]; *Topanga, supra*, 11 Cal.3d at 522; and *Lucas Valley Homeowners Association v. County of Marin* (1991) 233 Cal.App.3d 130, 142.)

#### **B. A conditional use permit cannot lawfully be used to grant variances from height or floor area ratio requirements.**

In addition to needing variances for the front yard setback and parking deficiencies, the Project requires variances for height and floor area ratio (“FAR”). The City is purporting to approve such variances through a conditional use permit. It is well settled that a use permit is not a legal substitute for a variance. (Government Code § 65906 [noting that the statutory provisions pertaining to variances “shall not apply to conditional use permits.”]; *Tustin Heights Association v. Board of Supervisors of Orange County* (1959) 170 Cal.App.2d 619, 627 [court observes that “a conditional use and variance are not one and the same and the provisions for each of them are not to be construed together as reciprocal parts of an integrated ordinance . . .”]; *see also Neighbors in Support of Appropriate Land Use v. County of Tuolumne* (2007) 157 Cal.App.4th 997 [court overturns granting of ad hoc exceptions from zoning requirements as violating the uniformity requirement of Government Code § 65852] and RZC § 19.760.010 [“The City recognizes that certain *uses* . . . require special review to determine if the *use* proposed . . . is compatible with surrounding uses, or through the imposition of development and use conditions, can be made compatible with surrounding uses.”] [emph. added].)

#### **C. The Findings do not address the height or floor area ratio exceptions being sought.**

Even if a conditional use permit could somehow grant variances from development standards such as FAR and height, the Conditional Use Permit Findings here are entirely silent as to these topics. In order to approve the Project, the City must find that the proposed Project height and FAR are: “substantially compatible” with other existing and proposed uses; not materially

---

<sup>7</sup> The findings purporting to support the Certificate of Appropriateness are likewise not supported by substantial evidence in the record as explained in the expert reports attached hereto.

detrimental to the public health, safety, or welfare; and in “furtherance of a compelling governmental interest and . . . the least restrictive means of furthering that compelling governmental interest.” (RZC § 19.760.040.) Per the Downtown Specific Plan (“DSP”), the City must also find that the proposed Project height and FAR “specifically supports the purpose and intent of the Raincross District and [are] compatible with surrounding development and design.” (DSP §§ 6.5.1(B)(2), 6.5.2(B).)

As noted above, the Project is not compatible with existing uses. The City must also explain how such major exceptions for height and FAR are in furtherance of a compelling governmental interest and the least restrictive means of furthering that interest. We do not believe it is possible to credibly make such findings for the Project. The City is also required to explain how the Project height and FAR support the purpose and intent of the Raincross District and are compatible with surrounding development and design. The City has failed to make the necessary findings for height and FAR, as required. (Code of Civil Procedure § 1094.5(b) [court reviews land use decisions for abuse of discretion; “[a]buse of discretion is established if . . . the order or decision is not supported by the findings, or the findings are not supported by the evidence.”].)

#### **IV. The Project is Inconsistent with the City’s General Plan.**

All local land use decisions, including consideration of this Project, must be shown to be “consistent with” the applicable general plan. (*Citizens for Parks & Recreation v. Superior Court* (2016) 2 Cal.5th 141, 152 [invalidating project approval where not shown to be consistent with general plan]; *Families Unafraid to Uphold Rural Etc. of Placer County v. Board of Supervisors of Placer County* (1998) 62 Cal.App.4th 1332, 1336 [county abused its discretion by approving a development project inconsistent with general plan policies].)

The City’s General Plan is effectively the “constitution for all future development” in the community, and any subordinate land use action that is not shown to be consistent with the general plan is “void ab initio.” (*Leshar Communications, Inc. v City of Walnut Creek* (1990) 52 Cal.3d 531, 540, 545.) “The propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements.” (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 570.)

In order to be deemed “consistent,” a proposed project must actually be “compatible with the objectives, policies, general land uses, and programs specified in the General Plan.” (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 378-79 [county abused its discretion in adopting a specific plan that permitted development without “definite affirmative commitments to mitigate” impacts to traffic and housing contrary to policies and objectives set forth in its general plan].) “Consistency requires more than incantation, and [an agency] cannot articulate a policy in its general plan and then approve a conflicting

Riverside City Council  
August 16, 2021  
Page 9

project.” (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 789.)

Failure to comply with even *one* general plan policy is enough to render a project “inconsistent” with the general plan, and any project approvals would be invalid. (*See, e.g., Spring Valley Lake Association v. City of Victorville* (2016) 248 Cal.App.4th 91 [invalidating city’s approval of permit for commercial development because of failure to show consistency with one general plan policy]; *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 640-642 [finding a project to be inconsistent with an agency’s general plan based on its failure to comply with a single policy requiring the agency to “coordinate” with specified resource agencies on mitigation for impacts to special-status species]; *accord, Endangered Habitats League, supra*, 131 Cal.App.4th at 789 [project’s failure to comply with a single general plan provision calling for use of a prescribed traffic study methodology].)

The Project is manifestly inconsistent with *several* of the City’s fundamental objectives and policies embodied in the General Plan, as shown in the chart attached hereto as Exhibit C.

**V. The Project Conflicts with Public Bidding Law and the Approved Purchase & Sale Agreement.**

In its July 18, 2017 Request for Qualifications (“RFQ”) for the Site, the City stated that it was soliciting applications from development firms interested in “the collective and concurrent: 1) adaptive reuse of the currently vacant Historic Fire Station No. 1, located at 3466 Mission Inn Avenue, which shall be limited to dining, entertainment, brewing establishments/brew pubs, night club, art gallery, or office uses and 2) development of an upscale hotel located at 3398 Mission Inn Avenue, which shall include, at a minimum, 5-stories, a restaurant, and rooftop bar and guest lounge (collectively the ‘Project’).”

Despite the RFQ’s requirement for “collective and concurrent” development, the Project applicant acknowledges in its July 29, 2021 Project Narrative that: “There is no timeline associated to any interior improvements . . . inside the fire station, and those will be handled on a separate permitting process.” (Project Narrative, p. 4.) The applicant’s statement in this regard is in direct contravention of the RFQ.

The applicant’s proposal to reuse the Historic Station at some unspecified point in the future also conflicts with the Purchase & Sale Agreement (“PSA”) it entered into with the City. In Section 1.3.2, the parties acknowledge that “the Properties must be developed concurrently and cannot be constructed, rehabilitated or developed independently.” That section goes on to say that if the Project applicant/Buyer should fail to develop the Properties concurrently, “the Sellers shall have the ability to terminate this Agreement and seek all available remedies under the law as well as those set out in Sections 6 and 7.”



Riverside City Council  
August 16, 2021  
Page 10

Moreover, Section 1.3 of the PSA expresses Buyer's intent to adaptively reuse the Historic Station as a hotel lobby for a 161-room hotel. The applicant is not intending to use the Historic Station as a hotel lobby, but instead is proposing to develop two hotels (containing 226 rooms) with two lobbies on the small site. Section 2.4 states that the Parties had agreed to the conceptual project depicted in Exhibit D to the PSA. The conceptual project bears no resemblance to the Project proposed for approval. The City Council cannot lawfully approve the Project as proposed without amending the PSA.<sup>8</sup>

Further, while the Project consists of a high end boutique hotel—AC by Marriott—it also includes the Residence Inn, which is described an “extended stay product with kitchenettes.” (Project Narrative, p. 1) The Project applicant acknowledges that the two products are quite different:

The AC and Residence Inn both meet different market demands in the Riverside downtown hospitality environment. The AC is expected to cater to the higher end business guest who travels with the Marriott Rewards program. This product is for the traveler that isn't spending much time in their room and needs a very simple and streamlined setup. The typical business guest staying at the AC will be here for Convention Center events, or public/private business with many of the government and private businesses in the area.

The Residence Inn caters to a different guest than the AC. These rooms are much larger inside and include kitchenettes for longer staying guest. These guest (sic) typically are staying 3 days and longer and will be spending more time in their rooms. While the downtown core has many great places to eat, some guest prefer to visit a grocery store and stock their rooms with food to prepare their own meals. The expectation is that these guests are here to stay close to a friend or relative undergoing treatment at Riverside Community Hospital or perhaps as a travelling professor for one of the local colleges or universities. Even private companies will locate temporary employees on a special assignment that last longer then (sic) a typical short stay. (Project Narrative, pp. 1-2.)

As such, the Project is not consistent with the RFQ in at least two additional ways. First, the Project contains two hotels, not one as advertised in the RFQ. The proposal that was awarded to the applicant was for one high-end Hilton hotel comprised of 161 rooms. (See May 8, 2018 Staff

---

<sup>8</sup> The City Manager was only authorized to make minor, non-substantive changes to the PSA. (Minutes, May 8, 2018, Agenda Item No. 17.) These changes are not minor nor non-substantive.

Riverside City Council  
August 16, 2021  
Page 11

Report to City Council, Agenda Item No. 17, p. 3.) Second, the Project contains one upscale hotel and one non-upscale hotel.

The RFQ also stated that the Project was expected to “exemplify exceptional architecture that compliments the surrounding buildings” and “must be consistent with . . . design standards and guidelines of the Mission Inn Historic [District] . . .” Moreover, the RFQ stated that the Project “must be consistent with the City’s parking requirements” and “must allow for ample parking to meet city codes...” The Project conflicts with both of these mandates by not conforming to the size, scale, and massing of surrounding buildings and by falling short of City parking requirements by 82 spaces.

It is neither fair nor equitable to those who submitted proposals in response to the RFQ to materially change the terms of the RFQ after it has been awarded to allow the successful bidder to develop a project substantially different than the one described in the RFQ.<sup>9</sup>

\*\*\*\*\*

In closing, Mission Inn has significant concerns with the Project. The Mission Inn thus joins its neighbors and many Riverside residents in urging the City Council to reject the Project, as currently configured, and send it back to the drawing board. Representatives of the Mission Inn will in attendance at your August 17, 2021 hearing on the Project. In the meantime, please do not hesitate to contact the undersigned with any questions regarding this correspondence.

Sincerely,

RUTAN & TUCKER, LLP



Peter J. Howell

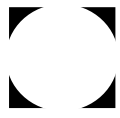
cc: David Bristow  
Phaedra Norton, City Attorney  
David Welch, Community & Economic Development Director  
Al Zelinka, City Manager

---

<sup>9</sup> It is also not clear whether the City complied with the Surplus Land Act (Gov. Code § 54220 *et seq.*) by noticing the availability of the Site for affordable housing and/or open space purposes. This seems especially germane given that the City was willing to sell the Site to the applicant for less than half of its appraised value. (May 8, 2018 Staff Report to the City Council, pp. 3-4.)



# EXHIBIT A



August 16, 2021

Mr. Peter Howell  
Rutan & Tucker LLP  
18575 Jamboree Road, 9<sup>th</sup> Floor  
Irvine, CA 92612

RE: Land Use and CEQA Analysis – City of Riverside Hotel Project, City Case Nos. P-19-0560, P-19-0561 and P19-0562

Dear Mr. Howell:

At your request, we have reviewed the Planning Commission staff report (Hearing Date April 15, 2021), City Council staff report and supplemental materials supplied to the City Council for its August 17<sup>th</sup>, 2021 meeting, historic records and associated materials relating to the proposed development of a 226 room dual-brand hotel at 3420-3482 Mission Inn Avenue, in the City of Riverside. The project, in addition to the hotel component, also proposes a parking garage and 12,000 square feet of office space in a historic building which was previously the City's downtown fire station. The purpose of our review was two-fold:

1. To determine whether the City has appropriately applied State Government Code and local law related to land use; and
2. Whether the determination that the project is exempt from the California Environmental Quality Act (CEQA) is appropriate in this case.

As described below, we find that the City has inappropriately allowed variances for the project, and violated the requirements of CEQA.

#### Project Description

The applicant proposes the development of 226 hotel rooms in an eight-story U-shaped configuration, over a subterranean parking structure, and the conversion of the existing historic downtown fire station into 12,000 square feet of office space (for lease, no tenant identified) and 6,172 square feet of storage for the hotel and office uses. The project proposes a total of 173 parking spaces for all the uses, falling far short of the City's Zoning Ordinance requirement for a total of 255 spaces. It is important to note that the parking requirement in the staff report is understated. According to the Downtown Specific Plan, hotels require 1 parking space per room plus parking for ancillary uses, at a 50% reduction from the stated standard. In this case, the lounges, bars and roof decks, all of which are open to the public, require parking spaces. Neither the square footage for these areas, nor an analysis of the parking required for them, is included in the staff report. Therefore, the requested variance for parking is much more significant than the 82 space deficit disclosed in the staff report.

The project also proposes front setbacks for new structures at 1 foot, rather than the required 15 foot front yard setback. The parking and setback deficiencies are proposed to be approved through two variances.

The City has determined that although the project requires CEQA review, it qualifies for exemption under Guidelines Section 15332 because it is infill development, and 15331, because it claims that the existing fire station will be restored. The City prepared an analysis, with technical studies, in support of this determination.

The Variances are not Consistent with State law

Cities are granted the right to approve variances by California Government Code Section 65906. The allowance, however, is purposely narrow in scope, and is intended to be used only under very specific circumstances when specific conditions would render land otherwise unusable:

“Variances from the terms of the zoning ordinances shall be granted only when, because of special circumstances applicable to the property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.” (emphasis added)

Contrary to the statements made in both the Planning Commission and “Revised Applicant Variance Findings” provided to the City Council, the proposed project site is rectangular in size, and is consistent in size and shape with all surrounding parcels in the area, as shown on page 1 of the Planning Commission staff report of April 15 (staff report). The site is flat, and neither its location or surroundings create a circumstance where the project could not comply with zoning standards. There is nothing “unique” about the site in the context of the downtown area, and the site is typical of the urban environment in this part of Riverside.

As stated in the City’s Zoning ordinance, all four Findings must be supported in order to allow a variance. In this case, Findings 1 and 2 alone cannot be supported. In addition, the City’s Findings for variances are completely inconsistent with Government Code, and allow the arbitrary and capricious use of variances for any purpose. Specifically, Finding 1 states:

“The strict application of the provisions of the Zoning Code would result in practical difficulties or unnecessary hardships inconsistent with the general purpose and intent of the Zoning Code.”

Nowhere in State law are “practical difficulties” considered a justification for a variance. Nowhere in State law is the reduction of a front yard setback or the reduction of a parking standard considered an “unnecessary hardship.” The Finding, in and of itself, is not an appropriate use of land use controls, and is simply an easy excuse to throw out the rules if they are inconvenient.

In this case, the justification provided by the City in both the Planning Commission staff report and the “Revised Applicant Variance Findings” provided to the City Council is completely arbitrary and capricious. It describes as sufficient that the project has complied with “most” development standards. It further justifies the setback variance by finding that it would reduce guest rooms and parking, neither of which are relevant to the provisions of law. Further, given that the parking is subterranean and would not be impacted by a 15 foot setback, since the parking structure could still be built under it, the argument is baseless. When analysing the parking reduction, the City’s Planning Commission analysis states:

"Compliance with the parking requirements would apply parking standards to an urban infill project that are not suitable to the context. Strict compliance with parking requirements would necessitate adding additional parking spaces, resulting in a reduction in the amount of guest rooms or the acquisition of additional property, each of which would constitute a practical difficulty due to the uniquely constrained nature of the site."

On its face this analysis is flawed. First, the text fails to describe that the parking requirements in the Raincross District of the Downtown Specific Plan were developed based on a parking study which specifically analyzed the urban environment being created in the Downtown Specific Plan (see further analysis below). Second, the parking for this project is being provided entirely underground, below the proposed structure. No additional land is needed, and no loss of hotel rooms would occur if the project simply added a subterranean parking level. The developer may not want the expense, but that is not grounds for a variance of a standard that has already been reduced to accommodate exactly the urban setting which the City argues justifies it. This is particularly true since the City's own Chapter 19.720.020.C states: "Financial hardship does not represent grounds on which to file a variance application."

In the "Revised Applicant Variance Findings" provided for the City Council, the language relating to setbacks has been modified, but the intent remains. The Findings continue to insist that the site is "unique" and that unnecessary hardships would result from requiring the parking prescribed in the Specific Plan.

Nowhere in the analysis of Finding 1 does the City address the vision, policies or standards of the Specific Plan or the Raincross District. The Finding is not only inconsistent with State law, it is not supported by substantial evidence, and the project cannot rely on it to allow either variance.

Finding 2 is the only one in the City's Zoning code which comes close to conforming with State law, but still falls short:

"There are special circumstances or conditions applicable to the property involved or to the intended use or development of the property that do not apply generally to other property in the vicinity and under the identical zoning classification."

Based on this Finding, the City argues that the inability to acquire additional land and the project's location in a historic district both are special circumstances that prevent the project from implementing the front setback requirement, again because it might result in fewer hotel rooms. This is neither appropriate justification nor germane to a variance Finding. The property is entirely consistent in shape, size and context with its neighbors. It is an urban block that is regulated by the urban standards established in the Specific Plan. That Plan explicitly aims to create a vibrant environment that encourages pedestrian activity, and requires the 15 foot setback on Mission Inn Avenue to bring consistent urban fabric to this historic sub-district. The loss of a few hotel rooms is not a special circumstance, and is not adequate justification for the City to support the variance.

Furthermore, both sets of Findings argue that the setback should be reduced because the existing historic fire station has no setback. That statement is false. The fire station, on its Mission Inn Avenue frontage, is set back from the public right of way approximately 16 feet. A second floor projection extends over that setback in the westerly 48± feet of the structure. As can be

clearly seen on the Site Plan provided by the applicant (sheet A1.01, Planning Commission packet Attachment 7) the fire station walls are located further south than the proposed hotel building, by a distance of about 15 feet. That drawing clearly shows the location of the fire station doors and the ground floor of the building, without the second floor projection. Where the hotel structure begins, it is clearly further north than the fire station's location. The City's attempt to justify a variance is blatantly manufactured.

Finally, in the "Revised Applicant Variance Findings," the applicant attempts to present a Specific Plan guideline as a standard to justify the setback. The Specific Plan Design Guidelines state: "New structures should reflect the traditional widths of historic structures in the area." (15.8.1(2), emphasis added). In the Findings, however, that suggestive statement becomes a mandate: "the Specific Plan provides that the facades of new structures (i.e., the hotel) maintain the setback of existing historic structures..." Given that the fire station is set back from Mission Inn Avenue further than the hotel building, and that the Guidelines are suggestions not requirements, that statement is patently false.

As it relates to the parking variance, the analysis in both the Planning Commission and "Revised Applicant Variance Findings," once again ignore the Specific Plan's parking requirements, and instead seeks to further reduce the standard on the basis that the majority of patrons will use transit or can park in public parking lots surrounding the site. Both sets of Findings reference only the Zoning code parking standards. Nowhere in the analysis, however, does the City explain that the Specific Plan has its own standards based on a parking study specific to the downtown; or how the standards calculated in the Specific Plan on the basis of reduced demand and use of transit were somehow miscalculated or improperly analyzed. The only part of the analysis that is appropriate is the discussion of the existing fire station, and how the parking garage cannot extend below that structure, because of its historic significance. That argument, however, does not justify a parking reduction, since as previously stated, another parking level can simply be added to the balance of the site to meet the parking requirement.

The "Revised Applicant Variance Findings" add that the variance is appropriate because other buildings have access to public parking. In no way is that "right" as characterized in the Findings, appropriate for this Finding. First, the hotel's guests and visitors will have the same "right" to use public parking, regardless of whether the hotel has valet parking that reduces "the need for guests to self-park." There is no substantial evidence that this statement is true. On the contrary, the requirement for valet parking is likely to cause some guests to look for self parking, in order to avoid paying a tip to a valet (and regardless of whether a parking fee is imposed). Second, as described in the Specific Plan, the reduction in parking standards that were calculated for this part of the City included consideration of existing and planned public parking.

#### The Variances are not Consistent with the Downtown Specific Plan

The site is zoned Downtown Specific Plan, Raincross District and Cultural Resources Overlay. In the Raincross District, which is a subdivision of the Downtown area, setback standards are explicitly established:

"For parcels that have frontage on Mission Inn Avenue between the 91 Freeway and Main Street, the minimum setback shall be 15 feet. The front yard setback should incorporate a combination of "soft" features, such as landscaping, water, etc. and

"hard" features, such as pavers, ironwork fencing, etc. No parking is permitted in the front yard setback. " (Downtown Specific Plan, Section 6.5.5(2))

The purpose of all of the standards for the Raincross District and the Mission Inn Historic District in which the project is also located is described in Section 6.1:

"The center of the District is occupied by the Mission Inn Historic District, which contains Riverside's most important historic buildings. In this sub-area the development standards have been carefully crafted to maintain a scale of development that is compatible with the well-established historic fabric of the district."

In Section 6.6, the importance of design standards is further described:

"the design standards and guidelines for the Raincross District are intended to create a vibrant, pedestrian friendly downtown by encouraging pedestrian orientation to the storefronts, human scaled spaces, and pedestrian amenities."

The project, however, proposes a 1 foot setback which pushes the building to the sidewalk for the entire length of the project on Mission Inn Avenue, totally disregarding the Specific Plan's vision, and eliminating any pedestrian amenities, "soft" features and places where a pedestrian can find relief. Although one would expect that the historically significant fire station building, which is a pre-existing non-conforming use from the perspective of setbacks, would be allowed to continue, the City, for no reason other than to be consistent with the fire station's location, throws out the vision of the Specific Plan and proposes a variance. There is no basis for the variance in State law, and the use of the variance in the context of the Specific Plan's vision is completely inappropriate.

As it relates to parking, the requested variance is similarly inconsistent with the Specific Plan. The Specific Plan describes how the parking standards were reduced from the City's regular Zoning standards to account for the urban environment being created in Downtown, based on a comprehensive parking analysis conducted for a large and representative portion of the Specific Plan area:

"Most City Parking Codes, including Riverside's current code, set out parking ratio requirements for individual stand-alone land uses. While this is appropriate for most areas of the City, it is not appropriate for downtown areas for the following reasons:

- There is much more interaction between land uses in downtown areas, as people walk from one building to another.
- There is usually more on-street parking in downtown areas. (For example, approximately 17% of the parking in downtown Riverside is on-street)
- More people ride transit to downtown because transit service (both routes and service frequency) tends to be focused on downtown.
- Parking costs are usually higher in downtown, so more people rideshare.
- The peak parking demand for different uses tends to occur at different times of the day, so some parking supply can be shared by multiple uses." (Downtown Specific Plan, Section 16.2.3.)

The Specific Plan goes on to provide parking standards that are based on all of the same principles that the Findings analysis for Finding 2 are based. Clearly, the City is attempting to “double dip” the parking reduction requirement by reducing the parking standard twice. Yet nowhere in the Findings is the Specific Plan’s reduction analysed or considered. Again, the basis for the City’s Findings is arbitrary and capricious, and not based on substantial evidence.

#### The Project Cannot be Exempted as an Infill Project

CEQA provides specific conditions under which an infill exemption can be granted.

“Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.”

In this case, the project cannot be exempted because it is not consistent with “applicable zoning designation and regulations” and will have significant traffic and noise impacts.

A variance, by definition, is an acknowledgment that a project does not conform with applicable zoning regulations. Indeed, section 19.910.230 of the City’s Zoning ordinance defines “variance” as follows:

“Variance, pursuant to Section 65906 of the Government Code, a land use action that allows for deviation from the terms of the Zoning Code under specified conditions and specifically, when, because of special circumstances applicable to a property, including size, shape, topography, location, or surroundings, the strict application of the Zoning Code would deprive that property of privileges enjoyed by other property in the vicinity and under identical zoning classification.” (emphasis added)

A deviation from the Zoning Code is not consistent with “applicable zoning...regulations.” On that basis alone, the exemption fails. The City’s analysis,<sup>1</sup> never uses the word variance, except in the list of project applications, and never once describes the variances in its review of consistency with the General Plan and Zoning standards. On the contrary, the analysis states that the project is entirely consistent with the Downtown Specific Plan, and the standards of the Raincross District. Absolutely no substantial evidence of consistency is provided, and given that the project fails to provide either a minimum front yard setback or sufficient parking to meet the standards of the Specific Plan or of the District, the opposite is true. The project is not consistent with the applicable zoning designation (Raincross District) and therefore cannot be exempted as infill.

---

<sup>1</sup> “Class 32 Infill Streamlining Checklist,” prepared by Sagecrest Planning & Environmental, March 2021.

The analysis goes on to consider traffic, noise, air quality and water quality. In its analysis of traffic impacts, the two sentences of analysis of construction traffic impacts state that there will be impacts associated with construction, but that this impact will be temporary and will therefore be less than significant. No evidence of how the impact will be less than significant is presented, nor does the traffic impact analysis appended to the analysis address construction traffic. CEQA does not allow an impact to be written off on the sole basis that it is temporary. One cannot ascertain the level of impact, since no evidence is provided, but the mere fact that an impact is declared causes the exemption to fail.

As it relates to noise impacts, the analysis states that the project will result in vibration impacts, and consistent with the noise impact analysis appended to the document, states that "non-impact pile driving equipment" will be required. This requirement, however, is not included in the conditions of approval for the project, and is an impact under CEQA requiring mitigation. In addition, the noise impact analysis of vibration impacts to historic structures includes several surrounding buildings, but never addresses the impacts to the City's fire station. Given that the analysis assumes a distance of at least 30 feet, the stated vibration levels are not representative of the vibration that will be experienced on the project site, at a significant historic structure. Therefore, on the basis that mitigation is required to reduce impacts by requiring non-impact pile driving equipment, and that vibration impacts to a significant historic structure have not even been considered, the exemption fails, and cannot be used in this case.

#### The Project Cannot be Exempted under Section 15331

First, this exemption specifically states that the exemption only applies to "project limited to maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of historical resources." The project in this case is much more than this, and includes construction of new facilities that will impact this historic structure. As stated above, the project will have potentially significant impacts on this structure due to vibration during construction.

Furthermore, the historic resource analysis prepared for the project is flawed. First, it defers any assessment of the impacts to the interior of this historic building to a future date. CEQA does not allow for such a deferral, and requires that all of the impacts be addressed as early in the review process as possible. In this case, the historical record for the property is clear. In 2008, the interior of the building was determined to retain "most of its original uses in their original spaces," including the iconic fire poles which were still in use at the time. Yet the proposed project will completely destroy the interior to convert it to offices and storage, and the historic analysis specifically states that no analysis of this conversion has been undertaken. Given that all of the interior features will be lost, the conversion of the building represents a significant impact to a historic resource, and cannot be exempted from review under the provisions of CEQA.

As thoroughly described in the technical memorandum prepared by Jenna Snow, and incorporated into this letter in its entirety by this reference, the analysis conducted by the applicant as it relates to the historic resources is significantly flawed. First, the historic fire station is not the only structure that may be adversely impacted by the project. As stated in the memorandum, the historic districts which the project occurs in may also be impacted. Second, the applicant's analysis fails to recognize the status of the fire station as a registered historic building at the State level, or the impacts of the mass and scale of the new hotel to the historic significance of both the structures and the districts which surround it. As stated in the technical memorandum at pages 9-10:



"The proposed project bears no relationship to the mass, scale and proportions of the buildings within its immediate vicinity. The six historic buildings in its immediate vicinity, as noted above, are generally two or three stories high. Three of the buildings in the immediate vicinity have a prominent tower element on the opposite corners of Mission Inn Ave. and Lemon St. (First Congregational Church, Universalist-Unitarian Church, and Riverside Municipal Auditorium). In contrast, the proposed project includes a much taller building that steps down at the corner while maintaining the parapet, in direct opposition to the pattern established by the surrounding buildings. The proposed project bears no relationship to the proportions and massing of the historic building."

The City's reliance on a technically and factually flawed analysis of a significant historic resource results in a complete failure to address the requirements of CEQA. The proposed project will have a significant direct and indirect impact on historic resources in the City of Riverside. The project must be required to prepare an EIR to adequately address the significant impacts to a State listed and Nationally eligible historic resource, consistent with the provisions of CEQA Guidelines Section 15064.5.

#### Conclusion

As clearly shown above, the City has clearly erred in both its consideration of the variances for this project, and its CEQA determination. There is no substantial evidence that either of the variances are appropriately applied for the project, and the City cannot exempt the project from CEQA, because the project is not consistent with Zoning, and a historic structure will be impacted. The project should be redesigned to meet the Downtown Specific Plan's standards, and adequate CEQA review conducted. Consideration of the application by the Planning Commission and City Council should be tabled until that redesign and CEQA analysis are complete.

Sincerely,



Nicole Sauviat Criste  
Principal

NICOLE SAUVIAT CRISTE  
Principal

---

Ms. Criste has been with Terra Nova since 1985. She has extensive experience in the preparation of CEQA documents, including the DSRT Surf Specific Plan and EIR, Museum Market Plaza Specific Plan EIR, the Dune Palms & Highway 111 Specific Plan EIR, and the North Apple Valley Industrial Specific Plan EIR. She also worked with multiple jurisdictions on "fast track" projects including the Hard Rock Hotel, Mondrian Hotel (now Dolce), Oceo residential project, Eagle Canyon project, Port Lawrence and Delgrano projects, among others; and is currently handling on-going case work for the City of La Quinta.

She has conducted and managed the preparation of several community General Plans, including those for the cities of La Quinta (2002 and 2012), Apple Valley and Banning. She was the Project Manager for the Patterson Park Neighborhood Revitalization Strategic Plan for the City of Riverside, and the Coachella Valley Association of Governments' Green for Life Program, for which the Terra Nova team prepared a Green Building Program and Municipal Benchmarking and Energy Management Program.

Among her public sector clients, Ms. Criste has provided land use and environmental planning services to a number of cities, including Palm Springs, La Quinta, Palm Desert, Cathedral City, Twentynine Palms, San Bernardino, Indio, and Rancho Mirage.

In addition to extensive land use and community planning experience, Ms. Criste also provides expert services in environmental, land use and development design analysis, fiscal and economic impact analysis, market research and marketing strategy development. She has conducted numerous market and economic impact studies, as well as environmental studies for economic development and redevelopment agencies in the region.

Ms. Criste has also taught CEQA classes for City staffs, and prior to the demise of redevelopment agencies, for the California Redevelopment Association's certification program for redevelopment professionals. Ms. Criste also works with a number of attorneys as a CEQA expert, providing technical analysis in support of court actions in southern California, Santa Clara County and Sacramento.

Ms. Criste is a graduate of Scripps College with a Bachelor of Arts degree in European Studies.

# EXHIBIT B

## Memorandum

DATE: August 16, 2021

TO: Peter J. Howell  
Rutan & Tucker, LLP  
18575 Jamboree Road, 9th Floor  
Irvine, CA 92612

FROM: Jenna Snow

RE: 3420-3482 Mission Inn Avenue, Riverside, CA

A development project is proposed for the site located at 3420-3482 Mission Inn Avenue (Assessor Parcel Numbers 213281006, 213281007, and 213281009, hereinafter “project site”). The project site consists of a surface parking lot (APNs 213281006 and 213281007) and a two-story building, the Central Fire Station (also known as Fire Station No. 1), located at 3420 Mission Inn Avenue (APN 213281009). Constructed in 1957, the Central Fire Station is individually listed in the California Register of Historical Resources (California Register) and has been identified as appearing eligible for listing in the National Register of Historic Places (National Register) as part of a survey in 2012. The project site is also located within two, overlapping, locally designated historic districts: the Mission Inn Historic District and the Seventh Street Historic District. Individually designated historic buildings surround the project site on three sides. The proposed development project consists of a 226 room 8-story hotel, 93-feet, 4-inches in height over three levels of subterranean parking on two parcels, as well as alterations of the former Central Fire Station.

The proposed development was found to be exempt from the California Environmental Quality Act (CEQA) review pursuant to Section 15331, which relates to Historical Resource Restoration/Rehabilitation, and Section 15332, which relates to In-Fill Development Projects. To support that finding, a Historic Resource Evaluation Assessment Report was prepared by George Taylor Loudon, AIA, Inc., dated January 13, 2021 (GTL Report) with a supplemental Historic Resource Evaluation dated July 15, 2021 (Supplemental GTL Evaluation). Both the GTL Report and Supplemental GTL Evaluation concluded that the proposed project conforms with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties (Secretary’s Standards)* and therefore does not have an impact under CEQA.

The following memorandum first provides a brief description of the Central Fire Station, followed by a description of the Mission Inn Historic District and Seventh Street Historic District as well as other historical resources located in the immediate vicinity. The memorandum then addresses and refutes the historical resource findings of the GTL Report.

### Central Fire Station

The Central Fire Station was listed in the California Register in 2008, based on a Department of Parks and Recreation form (DPR 523 series) prepared earlier that year by Tanya Rathbun Sorrell for Modern Riverside.com.<sup>1</sup> The 2008 DPR form that serves as the California Register nomination is included as Attachment A. The California Register nomination describes the Central Fire Station as follows:



**Figure 1:** Central Fire Station, 3420 Mission Inn Ave., north elevation, view south (Snow, 2021)

Central Fire Station is a highly intact and well-articulated International-style fire station...Central Fire Station is a one-and-two story flat-roofed structure constructed in 1957. It is irregular in plan, composed of four intersecting volumes which are each loosely organized around a function: the apparatus room, hose tower, dormitory/administrative wing, and the station office. The one-story apparatus room makes up the eastern half of the building, the station office makes up the first and second floors of the western half, and the hose tower and dormitory/administrative wing are attached to the rear of the apparatus room and station office. The second story of the station office is defined by a solid-looking rectangular volume set on top of the first floor. The second story hangs over the front of the first floor, supported by three thin steel *pilotis* spaced evenly apart along the front of the overhang. The apparatus room, dormitory/administrative wing and first story of the station office are faced in low-profile red bricks, while the second story of the station office is sheathed in smooth-textured plaster. The hose tower is unpainted poured concrete.

The 2008 DPR form identifies the Central Fire Station as significant under criterion 3 “as an excellent example of the International style applied to an institutional building in Riverside. It is one of the few (if not only) International-style buildings in downtown Riverside.” Exterior character-defining features enumerated in the 2008 DPR form are:

- The deconstruction of the building’s functions into intersecting geometric forms
- Emphasis on volume and asymmetry
- Flat roof
- Horizontal bands of windows with minimal exterior reveals and that turn the corner of the building
- Use of brick and smooth plaster to define space

---

<sup>1</sup> California Department of Parks and Recreation 523 forms are used both in surveys and to nominate properties to the California Register.

- Overhanging supported by *pilotis* to define the entryway
- Absence of ornament
- Louvered rectangular screens on west and rear elevations

Interior character-defining features identified in the 2008 DPR form are:

- original uses in their original spaces
- spatial arrangement and floor plan
- the fireman's poles that lead from the second story to the apparatus room
- characteristic features of the maintenance room (such as the undercarriage access pit and an I-beam used to remove engines)

The GTL Report does not reference the California Register nomination. Rather, it critiques a 2012 survey form prepared by Historic Resources Group, which assessed the Central Fire Station for eligibility for listing in the National Register as part of a larger survey effort. The later, 2012 DPR form is based, in large part, on the California Register nomination and updates the earlier one to include National Register eligibility. It is important to note that the 2012 DPR form was completed as part of a survey effort while the California Register nomination was reviewed and accepted by the State Historic Resources Commission. In fact, the GTL Report, in most places, seems quite unaware of the California Register listing as it refers to the Central Fire Station as a “potential historical resource” on page 39. As described more fully below, listed in the California Register, there is no doubt that the Central Fire Station is indeed a historical resource for purposes of CEQA. As a result of this omission of referencing the document that resulted in California Register listing, the GTL Report identifies different, exterior character-defining features than the California Register nomination and fails to recognize the three-dimensional emphasis on volume and intersecting geometric forms of the Central Fire Station as well as all interior character-defining features. Review of the design of the new building, therefore, focuses simply on the façade and its two-dimensional qualities.

As the GTL Report seems to be quite unaware of the California Register nomination, it states that “there are limited character-defining features present within the interior spaces [of the Central Fire Station], stemming from multiple alterations of the non-public spaces” (page 12) and goes on to describe that “interiors throughout this building...have been remodeled and subdivided numerous times. A consequence is that there are few apparent surviving elements” (page 40). This statement is not supported by alteration permits or photographic documentation. It also contradicts the California Register nomination for the Central Fire Station that does not limit character-defining features to the exterior. If there have been substantial changes to the interior since 2008, those changes should be substantiated by documentary and physical evidence, which is not provided in the GTL Report. In the absence of such evidence, it is assumed that any character-defining features identified in the California Register nomination continue to be extant and must therefore be preserved in a project that conforms with the *Secretary's Standards*.

Furthermore, the GTL Report does not consistently describe the architectural style of the Central Fire Station. The report variously describes the style as “early modern” (page 17 and 20), “proto-Modern” (page 23), “proto-early-modern” (page 26 and 27), and “proto-modern, ‘International Style,’” (page 44). “Modern” architecture is typically used as an umbrella term to reference a variety of architectural styles employed throughout the twentieth century, one of which is “International Style.” The California Register nomination for the Central Fire Station defines the architectural style as “International Style” and clearly illustrates how the building embodies the style. Inconsistent and

ambiguous descriptors throughout the GTL Report misrepresents the building and its architectural significance.

### Mission Inn Historic District



**Figure 2:** View west along Mission Inn Ave from the northwest corner of Mission Inn Ave. and Lime St. (Snow, 2021)

The Mission Inn Historic District was locally designated in 1986 and described in the *City of Riverside Downtown Specific Plan* as a:

commercial district...bounded roughly by 6<sup>th</sup> Street between Main Street and the Riverside Freeway (Route 91) on the north to 11th Street between Orange and Main Streets on the south. The period of significance is 1871 to 1946. The district encompasses part of the Seventh Street Historic District and is distinctive for its embodiment of the Mission Revival style, a regional architectural movement that drew from the precedent of the Franciscan Missions.<sup>2</sup>

The Mission Inn Historic District is a large area that encompasses the core of downtown Riverside and “contains Riverside’s most important historic buildings.”<sup>3</sup>

### Seventh Street Historic District

The Seventh Street Historic District was locally designated in 1980 and was the City of Riverside’s first historic district. The mile-long historic district spans Seventh St. (now Mission Inn Ave.) from the Santa Fe railroad tracks to the Buena Vista Bridge and is “one of the city’s most cohesive districts of historically and architecturally significant buildings.”<sup>4</sup> Indeed, the Seventh Street Historic District has been called Riverside’s “big front porch” of the Mission Inn.<sup>5</sup> The Seventh Street Historic District and the Mission Inn Historic District overlap, with the project site located within that portion that intersects.

### Historical Resources in the Immediately Surrounding of the Project Site

In addition to the Mission Inn, which is located a city block to the west of the project site, other contributing buildings within the Mission Inn Historic District, immediately surrounding the project site, include:

1. Young Men’s Christian Association Building (YMCA), 1909, 3485 University Ave., City Landmark
2. First Congregational Church, 1912-1914, 3504 Mission Inn Ave., individually listed in the National Register, as well as a City Landmark
3. Universalist-Unitarian Church, 1891, 3525 Mission Inn Ave., City Landmark
4. Riverside Municipal Auditorium, 1927-1929, 3485 Mission Inn Ave., listed in the National Register, as well as a City Landmark

---

<sup>2</sup> City of Riverside, *Downtown Specific Plan*, adopted November 2002, last amended 2017, 2-7.

<sup>3</sup> City of Riverside, *Downtown Specific Plan*, adopted November 2002, last amended 2017, 6-10.

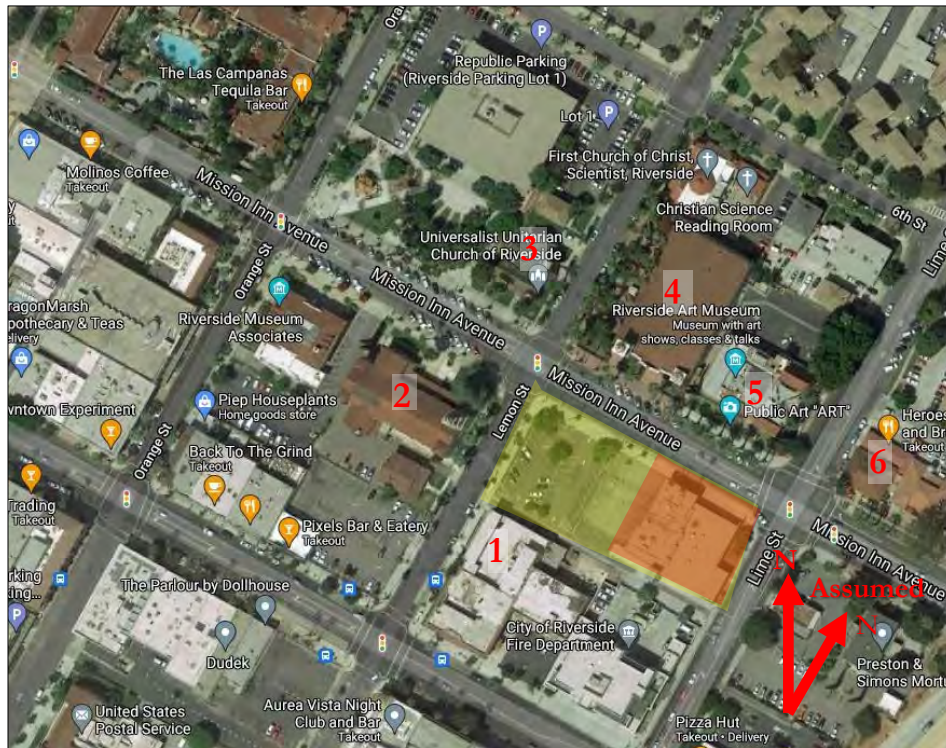
<sup>4</sup> City of Riverside, Interoffice Memo to the Cultural Heritage Board from Alan Curl, “Downtown Seventh Street, Riverside City Landmark #40, Statement of Significance,” December 3, 1992.

<sup>5</sup> Michael L. Rounds, *Whatever Happened to Seventh Street: Frank Miller and the Remaking of Riverside*, (Riverside, CA: Mission Inn Museum Press, 1997).



5. Old YWCA Building/Riverside Art Museum, 1929, 3425 Mission Inn Ave., listed in the National Register, as well as a City Landmark
6. Riverside Arlington Heights Fruit Exchange, 1923, 3391 Mission Inn Ave., listed in the National Register, as well as a City Landmark

The following map identifies the above buildings in relation to the project site. The project site is highlighted yellow, while the Central Fire Station is highlighted orange. Numbers on the below map correspond to the numbers listed above. As shown in the below map, the project site is surrounded on three sides by individually designated historical resources.



#### California Environmental Quality Act (CEQA)

The purpose of CEQA is to evaluate whether a proposed project may have an adverse effect on the environment and, if so, if that effect can be reduced or eliminated by pursuing an alternative course of action or through mitigation. The *Guidelines for California Environmental Quality Act* (CEQA Guidelines) are the regulations that govern the implementation of CEQA. The CEQA Guidelines are codified in the California Code of Regulations (CCR), Title 14, Chapter 3, § 15000 et seq. and are binding on state and local public agencies. The basic goal of CEQA is to develop and maintain a high-quality environment now and in the future.

CEQA defines a historical resource as:

a resource listed in, or determined eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources..., or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant (California Public Resources Code, PRC §21084.1).



Because the Central Fire Station is listed in the California Register, it is without question a historical resource under CEQA. Furthermore, as the Mission Inn Historic District and Seventh Street Historic District are locally designated historic districts, they have presumptive significance under CEQA and are also historical resources. Finally, the six buildings in the immediate vicinity that are listed in the National Register and/or are designated City Landmarks, are also historical resources.

According to the CEQA Guidelines, a project would result in a significant impact to historical resources if it would cause a substantial adverse change in the significance of an historical resource. A substantial adverse change is defined in CEQA Guidelines §15064.5(4)(b)(1), as “physical demolition, destruction, relocation, or alteration of the resource *or its immediate surroundings* such that the significance of an historical resource would be materially impaired” (emphasis added). The significance of an historical resource is materially impaired, according to CEQA Guidelines §15064.5(4)(b)(2), when a project:

- (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
- (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to §5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of §5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of the evidence that the resource is not historically or culturally significant; or
- (C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.<sup>6</sup>

Under CEQA, the key issue relates to how a proposed development may impact the eligibility of a structure(s) or a site for designation as an historic resource.

The CEQA Guidelines also specify a means of evaluating the relative significance of project impacts on historical resources. CEQA Guidelines §15064.5(b)(3) states:

Generally, a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (Weeks and Grimmer, 1995), shall be considered as mitigated to a level of less than a significant impact on the historical resource.<sup>7</sup>

The *Secretary's Standards* were developed by the U.S. Department of the Interior as a means to evaluate and approve work for federal grants for historic buildings and then for the federal rehabilitation tax credit (see 36 Code of Federal Regulations Section 67.7). Similarly, CEQA recognizes the value of the *Secretary's Standards* by using them to demonstrate that a project may be approved without an environmental impact report (EIR). In effect, CEQA has a “safe harbor” by providing either a categorical exemption or a negative declaration for a project which meets the *Secretary's Standards* (see State CEQA Guidelines Section 15331 and 15064.5(b)(3)).

---

<sup>6</sup> CEQA Guidelines §15064.5(4)(b)(2).

<sup>7</sup> CEQA Guidelines §15064.5(b)(3).

In summary, the definition of substantial adverse change is whether a project demolishes or materially alters in an adverse manner the physical characteristics that convey historical significance of the resource or that justify its eligibility for the California Register or a local register. In other words, if a project would render an eligible historic resource ineligible then there would be a significant adverse effect under CEQA.

#### The GTL Report does not Adequately Consider Direct or Indirect Impacts of the Proposed Project

The GTL Report includes a myriad of regulations, not all of which are applicable to this project and confuse the purpose of the report. For example, the GTL Report includes an excerpt from the California State Historic Building Code, which does not have any relevance to assessing impacts of a proposed project under CEQA. Rather, the California State Historic Building Code provides alternative means and methods for meeting local building codes when rehabilitating a historic building. The only question the GTL Report should answer is: does the proposed project have either a direct or indirect impact on historical resources that would render any of them ineligible for designation. While the GTL Report minimally assesses the proposed new building for potential impacts to the Central Fire Station, it does not adequately consider direct and indirect impacts to the Central Fire Station or on the Mission Inn Historic District, the Seventh Street Historic District, or individually designated resources surrounding the project site on three sides.

#### *Direct Impacts to the Interior of the Central Fire Station*

As described above, CEQA Guidelines use the *Secretary's Standards* as a safe harbor to ensure that a proposed project would not render an eligible historic resource ineligible. The *Secretary's Standards* recognize both exterior and interior features. Rehabilitation Standards 2 states, "The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided." Without any evidence that interior features have changed since 2008, the GTL Report summarily dismisses all interior character-defining features that are part of its California Register listing and convey its significance as an International style fire station. Only by ignoring all interior character-defining features can the GTL Report conclude that any future modifications to the interior would conform with the *Secretary's Standards*, an assertion that is incorrect.

Although the proposed project identifies a new use for the Central Fire Station, converting it into office space and storage, modifications to the interior of the Central Fire Station are proposed for a future time and are not described in the GTL Report. As the GTL Report dismisses all interior character-defining features, it is able to state that any and all work on the interior of the Central Fire Station would not cause an impact. However, the 2008 California Register listing of the Central Fire Station does indeed include interior character-defining features. Because the GTL Report ignores the interior character-defining features and likely modifications, it cannot validly conclude that the project conforms with the *Secretary's Standards*. It is quite likely that future modifications will destroy interior character-defining features included with the California Register listing and would therefore not be in conformance with the *Secretary's Standards*.

#### *Direct Impacts Caused by Vibrations*

The proposed project includes construction of a three-story subterranean parking garage. Vibration impacts could constitute a significant direct impact to both the Central Fire Station and YMCA Building, located directly south of the project site and separated from it by only a narrow alley. While the CEQA checklist notes that "at distances ranging from 30 to 215 feet from Project construction activity, the typical project construction vibration levels will satisfy the historic building damage

thresholds,”<sup>8</sup> both the Central Fire Station and YMCA Building are closer than 30 feet from proposed construction activity. The GTL Report is remiss when it does not consider potential vibration impacts that could damage to either structure.

#### *Indirect Impacts to the Setting of Historical Resources*

The proposed project is located within two locally designated historic districts and is surrounded on three sides by individually listed historical resources. As the proposed project will be an addition to the Mission Inn Historic District, as well as the Seventh Street Historic District, it must conform with the *Secretary’s Standards*, specifically, Standards 9 and 10 that address additions. Standards 9 and 10 state:

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Guidance on conforming with the *Secretary’s Standards* 9 and 10 is published by the National Park Service in Preservation Brief 14: *New Exterior Additions to Historic Buildings: Preservation Concerns* (published in 2010).<sup>9</sup> This document updates and expands guidance provided in an earlier document that is referenced in the GTL Report (see page 100), an obvious omission of the GTL Report. Both Preservation Brief 14 and the design standards included as part of the Downtown Specific Plan are intended to provide general direction, acknowledging that every situation is unique. As described in Preservation Brief 14: “The appropriate size for a new addition varies from building to building.”

The most important considerations noted in Standard 9, as well as highlighted in both the Downtown Specific Plan as well as described in Preservation Brief 14, is compatibility of mass, size, scale, and proportion of the proposed addition, or in this case, new infill development in a historic district. As noted in Preservation Brief 14, “An addition that bears no relationship to the proportions and massing of the historic building – in other words, one that overpowers the historic form and changes the scale – will usually compromise the historic character as well.”<sup>10</sup> Additionally, the Downtown Specific Plan states that “new structures should maintain the average scale of historic structures within the area.”<sup>11</sup>

The GTL Report compares the greater than 93-foot height of the proposed new building to two historic buildings within the Mission Inn Historic District: the Mission Inn and the Walling Building (Former First National Bank of Riverside). The GTL Report describes the Walling Building as a “tall

---

<sup>8</sup> Sagecrest Planning + Environmental, *California Environmental Quality Act (CEQA) – Infill Streamlining Checklist*, prepared for Greens Group, Inc., March 2021.

<sup>9</sup> Anne E. Grimmer and Kay D. Weeks, *Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns*, (Washington, D.C.: U.S. Department of the Interior, National Park Service, Technical Preservation Services, August 2010), <https://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm#dense-architecture>.

The Downtown Specific Plan provides design guidelines specific to downtown Riverside for achieving conformance with the *Secretary’s Standards*.

<sup>10</sup> Anne E. Grimmer and Kay D. Weeks, *Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns*, (Washington, D.C.: U.S. Department of the Interior, National Park Service, Technical Preservation Services, August 2010), <https://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm#dense-architecture>.

<sup>11</sup> City of Riverside, *Downtown Specific Plan*, adopted November 2002, last amended 2017, 15-28.

five story structure” (page 10). Based on visual inspection, the Walling Building appears to be four-stories high, an inaccuracy in the GTL Report. In addition, the GTL Report does not consider that the Mission Inn, which gave the historic district its name, is the cornerstone of the historic district. Set back from the street, the Mission Inn has variable heights and its mass is broken up over the entirety of its large site. Along Mission Inn Ave., the building rises only to four stories. The treatment of achieving a taller height in some portions of the building, as well as the scale of the development, is radically different from the monolithic height of the U-shaped, 93-foot, 4-inch tower of the proposed project.

In contrast to the assertion in the GTL Report, the proposed 93-foot, 4-inch building does not “maintain the average scale of historic structures within the area” as required by the Downtown Specific Plan. An average is an arithmetic mean found by adding a group of numbers, in this case, the heights of structures within the immediate surroundings, divided by how many numbers are being averaged, or the number of historic structures. Based on a casual visual review, the average is nowhere near the proposed 8-story building, but is rather closer to the two and three-story height exhibited in the six surrounding historical resources.

Furthermore, the GTL Report, with more emphatic discussion in the Supplemental GTL Evaluation, compares the height of the proposed development to two contemporary developments: new construction at Stalder Plaza, which will be 74-feet high and the Imperial Hardware Lofts project, which is 68-feet high.<sup>12</sup> The Supplemental GTL Evaluation states in several places that these two projects are “identical with the proposed Project” (see for example page 6). The Mission Inn Historic District is quite large and the immediate surrounding of one location is quite different from another. The project site is in a unique location, surrounded on three sides by individually listed historic buildings. The setting is not at all comparable with either Stalder Plaza or Imperial Hardware Lofts, neither of which are additions to historical resources, surrounded by individually listed historical resources. Both of these other projects are in different locations with vastly different conditions and cannot be said to be at all “identical” to the proposed project.” The assertion that they are “identical” is false and misleading.

While the Raincross District allows for a height of 60-feet, the proposed project is greater than 93-feet tall, more than 50% taller than what is allowed. The GTL Report states, the proposed project height “is recommended to be considered *harmonious* with the scale and volumetric character of these significant structures” (page 18, emphasis added). This statement of compatibility is not supported by any facts or evidence in the GTL Report. In reality, the height of the proposed project is not at all harmonious within its setting in the historic districts.

The proposed project bears no relationship to the mass, scale and proportions of the buildings within its immediate vicinity. The six historic buildings in its immediate vicinity, as noted above, are generally two or three stories high. Three of the buildings in the immediate vicinity have a prominent tower element on the opposite corners of Mission Inn Ave. and Lemon St. (First Congregational Church, Universalist-Unitarian Church, and Riverside Municipal Auditorium). In contrast, the proposed project includes a much taller building that steps down at the corner while maintaining the parapet, in direct opposition to the pattern established by the surrounding buildings. The proposed

---

<sup>12</sup> It should be noted that George Taylor Loudon, AIA prepared Historic Resource Assessments for both Stadler Plaza and Imperial Hardware Lofts. Both projects include retention of only a portion of the facades. While the projects were approved by the City of Riverside, generally retention of only a portion of a façade, which is sometimes called a “facadism” or “facadomy,” is not in conformance with the *Secretary’s Standards* and is not considered best preservation practice. Preservation economist Donovan Rypkema has written that retention of just a façade should be called “Halloween preservation...keeping the mask and throwing away the building.” (Donovan D. Rypkema, *Planning for the Future, Using the Past: The Role of Historic Preservation in Building Tomorrow’s Washington, D.C.*, September 2003), 17).

project bears no relationship to the proportions and massing of the historic building. There is no discussion in the GTL Report about indirect impacts to the setting of either historic district or any of the surrounding historic buildings. The setting of both historic districts, including the visual relationships between historic buildings surrounding the project site, are character-defining features that will be adversely impacted by a much taller and more massive building.

The GTL Report reviews in depth the proposed project for compatibility with the Downtown Specific Plan, specifically potential impacts to the Central Fire Station. However, review of the proposed project as “Infill Construction in Commercial Historic District” (Section 15.8 of the Downtown Specific Plan) is limited to a discussion of various heights of other buildings. The GTL Report gives only a cursory review of proposed project impacts on either historic district or surrounding historic buildings. It simply states, “the integrity of the property and its overall environment has been preserved” (page 55). Unfortunately, there is no discussion as to how the integrity of setting of the overall environment has been preserved to back the assertion.

The Supplemental GTL Evaluation identifies four of the six surrounding individually designated buildings, omitting the YMCA Building immediately adjacent to the south and Riverside Arlington Heights Fruit Exchange. The Supplemental GTL Evaluation states, “materials, scale, height, massing and compositional strategies have been inspired by the listed Signature buildings...during the development of the Project design” (page 30). Again, there is no evidence presented to support how the proposed project was inspired by the surrounding historical resources and the proposed project does not exhibit any clear inspiration from surrounding historical resources.

Pre-submittal meetings with members of the Cultural Heritage Board and City of Riverside Community Development Department Planning Division specifically requested that “design review of the proposed work should be coordinated with, and compatible in design character with the immediate Historic Context...Perspective renderings should include immediate site context structures” (GTL Report page 37). A need for an evaluation of historic context is reiterated on page 47 of the GTL Report. Perspective renderings include only the First Congregational Church. The GTL Report lacks any analysis of how the proposed project’s design is compatible with surrounding historic buildings. Such an analysis is essential to determine if there are potential impacts to the setting of either historic district or any of the six surrounding individually listed historical resources.

#### Conclusions of the GTL Report are not clear

Finally, conclusions of the GTL Report are not clear. On page 38, the GTL Report states, “the thin diameter piloti columns of the Fire Station No.1 appear to be widened; these are character-defining features where such alteration of dimension may prove problematic.” This statement suggests that there are concerns with the exterior rehabilitation of the Central Fire Station. In addition, while the GTL Report does not identify any historic resource impacts, it nevertheless recommends a “mitigation program” (see specifically page 41) and other recommendations to bring the proposed project into conformance with the *Secretary’s Standards*. Yet, mitigation measures are only included to mitigate significant impacts. As the GTL Report indicates that a mitigation program is needed, it would follow that the proposed project does not currently conform with the *Secretary’s Standards* and thus would constitute a significant impact to the Central Fire Station. As such, the City is precluded from relying on an exemption from CEQA for the proposed project.

#### Conclusion

The GTL Report does not sufficiently analyze potential direct or indirect impacts of the proposed project on historical resources. In addition to inconsistencies with the 2008 California Register nomination of the Central Fire Station, the GTL Report does not assess direct and indirect impacts

of the proposed project on the Central Fire Station, the two historic districts within which it is located, nor surrounding historic buildings. It does not adequately assess the proposed project for conformance with the *Secretary's Standards* and dismisses any potential impacts to character-defining features of the interior. As modifications to the interior are proposed for a future time, there is no way to assess impacts for conformance with the *Secretary's Standards*. Furthermore, there are no conditions of approval that would require retention and rehabilitation of interior character-defining features. Even if there were such conditions, they would be mitigation measures precluding the project from relying on categorical exemption(s). If the project were to be approved as it is currently proposed, interior character-defining features may be destroyed without any environmental review or analysis, which could cause a substantial adverse change in the significance of the Central Fire Station.

While the GTL Report concludes that there are no project impacts, it nevertheless recommends a mitigation program, indicating that the proposed project does not conform with the *Secretary's Standards* and thus would result in a significant impact on historical resources. As the project may cause a substantial adverse change in the significance of historical resources, including the Central Fire Station as well as the Mission Inn Historic District, the Seventh Street Historic District, and surrounding individually listed historical resource, reliance on categorical exemption(s) is not appropriate and an EIR must be prepared.

Attachments:

- Attachment A: 2008 DPR form
- Attachment B: Curriculum Vitae

Attachment A: 2008 DPR form for the Central Fire Station

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

8+\*@#15%A  
B/ >A 115318  
- +\*, &@#)  
: / B8 %'#"10%&S 3CS  
; " \$+D\*0%; 40  
/ SE\$F %&S / SE\$F \$+ 6 #'S

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

1 %& 9 ' / \$0&1+2\$%#(A\$&+A)\*+,-.#.\$/ )012\$%&/\$24 Central Fire Station  
8 GH ; ". \$+%C\$' \*%\$H Fire Station No. 1

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

J8 KH D&2#'%& I 81L)\*2#'%& X M +\$0'+2"SC J#H&1, '5% Riverside  
#, C\*!50)". / )5 3p2j5 /6)+7738)"9%8"7%):" ; ),). \$3\$, "2164  
JLHM N! %Q%  
RI#C Riverside East 6 #"S 1967 PR 1980 T2S; R5W; S.B.B.M.

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

2H3 CG\$00 3420 Mission Inn Avenue ( #'5 Riverside S> 8 92501  
CHM- 9 \*<=)\$> %2\$)8". )%.\$)%&P'2#\$)". / (82)?.\$"2)2\$, %23\$, 4 S&,\$ @7 )@ @: %  
SH; ". \$+D&2"%'& #)%#'#1)\*\$6#B; "23\$7CB- 237%., )742\$%A2\$B\$S="7%&B)\$36B, )"; ;2%42-"74  
Southwest corner of Mission Inn Avenue and Lime Street, APN 213-281-005, Assessor Address: 3466 Mission Inn Av.

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

J8 TH 6S 02+U"%& I%DS, 324S)2\$%A2\$)". / )-7, > "E2\$S> \$.7, 9)F.3%A\$ )\$ , #.B> "72"2, B3% / -7%&B)"72"7%, B,-CB,\$ 7-. #B' / )0%A / "2-\$, 4  
Central Fire Station is a highly intact and well-articulated International-style fire station located on the southwest corner of Mission Inn Avenue and Lime Streets in downtown Riverside, California. It faces northeast on a corner lot, surrounded by parking lots to the west and south, Riverside Art Museum to the north, and commercial buildings to the east. The station occupies an urban setting with high visibility within the Mission Inn Historic District, a locally designated historic district that was determined eligible for the National Register in 1986. It has sustained a few minor alterations to the interior and exterior, but overall retains a high degree of integrity. (see continuation sheet)

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

J8 TLH /S 0&1+2\$%#"4L1 "9D)\*9-, 7)"724A\$, )". / )3%\$, 4 HP-09 (Public Utility Building)  
J8 VH /S 0&1+2\$%#S0S, "I X HA-%- # I 7A37A2S J 0IS37 I- 7S D-, 7237 K2S> \$.74D-, 7237 J 7S2\*P%2"7S, B\$36(  
8 P#H) 8%7%2%2"L-.-# )\*! 8%742\$MA2\$ )&2)0A2-.-# , B, 72A37A2\$B' / )0IS37, 64



!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

8 PIH 6S 02+U"%& I%DS, 324S)2\$%A2\$)". / )-7, > "E2\$S> \$.7, 9)F.3%A\$ )\$ , #.B> "72"2, B3% / -7%&B)"72"7%, B,-CB,\$ 7-. #B' / )0%A / "2-\$, 4  
N-\$LB/ "7B'33\$, ,-% )C4  
View to the Southwest,  
11/16/2007  
' 8 WH  
Date Constructed/Age  
and Sources: 1957, City  
of Riverside Planning  
Dept. Address Files  
X Historic Prehistoric  
J8 CH ; F, \$+%, C%CC+\$001  
City of Riverside  
3900 Main Street  
Riverside, Ca 92521  
J8 XH / \$2&C\$C%61%> \$B  
"&2"7% B". / ) / 2\$, 40  
Tanya Rathbun Sorrell  
Modern Riverside.com  
3638 Linwood Place  
Riverside, CA 92506  
J8 YH 6 #"S%  
+\$2&C\$C 02/01/08  
J8 GH ! 1+ES5%5USI%7\$ ,.-=\$)P)  
Q"2-&2-")R\$#-,7\$2)  
O%&- "7%

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

J8 GGH / \$U&+"2#"%'& I)\*Q-7S), A2=\$)2S; %27. / )%8\$2) %A2\$, )%\$S.7\$2S. %.\$64  
none  
3""#2. @S "01 O%\$ 9%8"7%): " ; IT\$78): " ; X Q%7-.A"7% )I 8\$S7 X HA-%- #B)72\$7A2\$B' / J 0IS37)R\$3%2/  
+238"\$9%7#-3")R\$3%2/ D-, 7237)R\$3%2/ 9-.\$"2)U\$7A2\$R\$3%2/ :- ?-.)I7"7%.)R\$3%2/  
R%8T)+27)R\$3%2/ +27-&37)R\$3%2/ ! 8%742\$; 8)R\$3%2/ J7 8\$2)\*2,74(



**Description (continued):**

Central Fire Station is a one-and-two-story flat-roofed structure constructed in 1957. It is irregular in plan, composed of four intersecting volumes which are each loosely organized around a function: the apparatus room, hose tower, dormitory/administrative wing, and the station office. The one-story apparatus room makes up the eastern half of the building, the station office makes up the first and second floors of the western half, and the hose tower and dormitory/administrative wing are attached to the rear of the apparatus room and station office. The second story of the station office is defined by a solid-looking rectangular volume set on top of the first floor. The second story hangs over the front of the first floor, supported by three thin steel *pilotis* spaced evenly apart along the front of the overhang. The apparatus room, dormitory/administrative wing and first story of the station office are faced in low-profile red bricks, while the second story of the station office is sheathed in smooth-textured plaster. The hose tower is unpainted poured concrete.

The front elevation is separated into three focal points: the apparatus room, station office, and the second-story overhang. The apparatus room is cut with about a 65-foot-wide opening (without internal supports), separated into three bays by steel piers topped by a steel beam. Brass lettering which reads "Central Fire Station" is set on the beam atop the center bay, which is larger than the two side bays. All three bays are closed with metal roll-up doors. The garage doors have been replaced ca. 1990, but the existing doors occupy the same openings and appear compatible with the rest of the building. A solid door to the right (west) of the bays provides access to the apparatus room when the bays are closed. The station office has a comparatively modest entrance beneath the second-story overhang, through aluminum-framed glass double doors, which are flanked on the left (east) side by a square wood-framed picture window. A concrete walkway runs straight from the sidewalk to the office door, and then turns a right angle toward the bays. A brick planter with manicured shrubbery is set on the right side of the walkway. The second-story is characterized by a horizontal band of wood-framed metal windows with four vertically-aligned lights each. The bottom light of each window opens inward, hopper-style, and the window on the left end is wrapped around the left corner of the overhang.

The east side elevation (facing Lime Street) is composed of a brick wall covered in ivy. About 50 feet back from the façade the brick wall projects out about 25 feet towards Lime street and continues at that line to the rear elevation. A pair of wood-framed casement windows, each divided into a column of three-lights, are set into the north-facing side of the projection, which formerly housed a maintenance shop (now a weight room). The west side elevation is broken visually into three parts: the side of the first and second floors of the station office and a two-story brick cube-shaped dormitory/administrative wing attached to the station office. The dormitory/administrative wing houses the dormitory on the second floor and additional office space for the Fire Department staff on the first floor. It steps about three feet out from the rest of the side elevation. Each floor of the main station features a row of wood-framed casement windows that are almost identically spaced. The rows each consist of a single window, followed by three windows in one frame, and two top-aligned, shorter single windows. Instead of the single windows, the bottom row ends with another trio of windows. All of the windows have rectangular louvered sunshades made of aluminum, which are attached to the top of the window frame by hinges. The brick planter featured on the façade wraps around the side elevation of the station, planted with mature shrubbery. The side of the dormitory/administration wing is cut with a single-door entrance and two square openings fitted with vents.

The rear elevation is broken into four parts (from right to left): the rear of the maintenance shop, the rear of the apparatus room, the hose tower, and the rear of the dormitory/administrative wing. The maintenance shop, which projects outward from the apparatus room by about eight feet, is cut with one rectangular bay fitted with a roll-up door. The rear of the apparatus room bears a nearly identical resemblance to the front, with one large bay flanked by two smaller bays, all fitted with roll-up garage doors. The hose tower is about 40 feet high, and is composed of poured concrete topped with a louvered metal cap for ventilation. At the ground floor, rectangular vents are set into each exposed side of the tower. A single door on the west side of the hose tower rests on a low concrete step, to the right of the vent on that side. The second floor of the dormitory/administrative wing is adorned with three trios of wood-framed, three-light windows. Like the windows on the façade of the station office, the bottom light opens hopper-style. These windows are shaded by louvered aluminum shades attached to the top of the window frames. Similar louvered shades are also attached to two pairs of wood-framed, three-light windows on the ground floor, and over some electrical equipment to their left.

(continued)

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % 3 = ! % 3 : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 B \_\_\_\_\_

@ / > B 115318 \_\_\_\_\_

- + \*, & A #) \_\_\_\_\_

8 # 4 \$ 3 & ' 9 \_\_\_\_\_

! / \$ 0 & + 2 \$ % # A \$ % & - B % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

C 6 # " F 02/01/2008

X ( & " % , 1 # " &

? G D # ' S

### Description (continued):

The interior has retained most of its original uses in their original spaces with the spatial arrangement and floor plan mostly intact. The fireman's poles that lead from the second story to the apparatus room are intact and continue to be used. In 1996, the interior of the fireman's quarters were remodeled, partitioned into 9 individual rooms. Around the same time, the former dispatch office (located within the second story overhang) was removed and the space was remodeled for the Battalion Chief's office, with a new interior wall to create a small sleeping area. The maintenance room has been re-used as a weight room, but the characteristic features of the maintenance room (such as the undercarriage access pit and an I-beam used to remove engines) are extant. A wood-framed storage room was created in the maintenance room sometime in the last 20 years.

With the exception of the garage door replacement, a re-roof, and some interior partitioning of the dormitory, maintenance room, and station office, Central Fire Station remains remarkably intact and retains a high degree of integrity of design, materials, workmanship, feeling, association, and setting.

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~

6 7 8 3 / - 9 7 : - % < 3 / = ! % : 6 % 7 ( / 7 3 - > ; :

? @ > A 6 > . B C % - / @ ( - @ / 7 C % : 6 % ? D / ( - % 7 ( ; / 6

8 + E # + 5 %

G / > F 115318

!"#\$ 4 %& 9 : / G 8 % #' 10 % & H 3CS ' / \$ 0 & + 2 \$ % # E \$ % & T ( ) \* + , - . \$ / ) 0 1 2 3 % \$ 24 Central Fire Station

? I J G \* 0 ' & + 2 % # E \$ K Central Fire Station

? L J ( & E E & % # E \$ K Fire Station No. 1

? M ; + 4 \* , # ) % 0 \$ K Fire Station and Fire Department Headquarters ? N P % + \$ 0 \$ " % @ \$ K Fire Station and Fire Department Headquarters

Q P J 3 + 2 . \* ' 2 ' 1 + # ) % ' 5 ) \$ K International

Q Q ( & 0 ' + 1 2 % & % 0 ' & + 5 K % 5 % , 6 2 7 3 6 % ) " 6 8 " 9 6 2 " 6 % , 8 " . / ) " 6 ) 8 " 9 6 2 " 6 % , 4

Constructed 1957, existing maintenance shop partition extended for storage ca. 1985, first floor partitioned for video room ca 1989, apparatus room doors replaced ca.1990, re-roofed 1996, interior partitioning of dormitory 1996, former dispatch partitioned and remodeled for office ca. 1996.

Q R J 9 & S H T X : & U \$ 0 @ V , & W 6 # " \$ K ; + 4 \* , # ) % & 2 " % & K

Q X J / \$ ) # ' S H % \$ # " 1 + \$ 0 K

? Y # J 3 + 2 . \* ' 2 " K Bolton C. Moise, Jr.

? Y Z P % 1 \* ) H \$ + K Cal Construction Company

Q I J J ! 4 , \* 2 # , 2 \$ K % \$ E \$ International Style Architecture 3 + \$ # City of Riverside

8 \$ + \* H P & % 4 , \* 2 # , 2 \$ 1957 8 + & \$ + 5 % 5 \ \$ Fire Station 3 \ \ ) 2 # Z ) \$ % + \* ' \$ # 3 (CR)

\* : -, 37, , ) - ; < % 8 . 3 \$ ) - . ) 6 2 , ) % 8 = , 6 % 2 3 " 9 ) % 1 " 2 3 = 6 3 6 7 2 " 9 ) 3 % 6 \$ > 6 " , ) / \$ & \$ / ) 0 1 ) 6 = \$ , \$ 8 < \$ 2 % 8 ) " . / ) # \$ % 2 " < = 3 , 3 % 6 \$ ? ) + 9 , % 9 " / 2 \$ , , - 6 \$ # 2 6 1 4

Central Fire Station appears eligible for the California Register under criterion 3 at the local level as an excellent example of the International style applied to an institutional building in Riverside. It is the one of few (if not only) International-style institutional buildings in downtown Riverside. It conveys several character defining features of the style in its massing, fenestration, and decorative detailing. (see continuation sheet)

? I I J 3 H I P % & , # ) % \$ 0 & + 2 \$ % " + \* Z 1 ' \$ 0 K ( 6 ) " 6 2 0 7 6 , ) . / ) 3 % \$ , 4 none

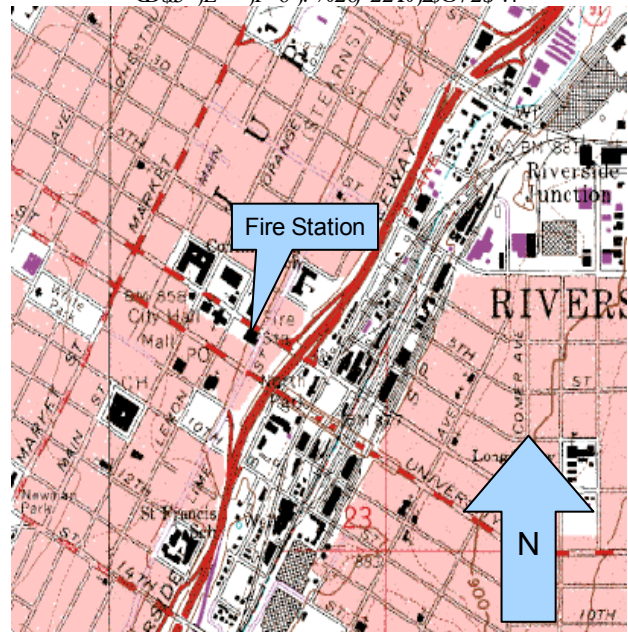
Q I L J / \$ ' \$ + \$ , 2 \$ 0 K (see continuation sheet)

? I M / \$ E # + V 0 K

Q I N J 7 S # ) 1 # " & K Tanya Rathbun Sorrell, M.A., ModernRiverside.com 06 # " \$ & % S # ) 1 # " & K 02/01/2007

\* A = , ) < " 3 \$ 2 \$ \$ 2 B \$ ) & 2 % 8 8 3 - " 9 3 % ; \$ . 6 4

\* C D \$ 3 = E " < ) F - 6 - . % 2 6 " 2 2 % 2 5 G 7 2 \$ 4



!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % 3 = ! % 3 : 6 % / 7 ( / 7 3 - > ; :

( ; :- > : ? 3 - > ; : % @ 7 7 -

8 + \* A # + 5 B

@ / > B 115318

- + \* , & A # )

8 # 4 \$ 5 & ' 9

! / \$ 0 & + 2 \$ % # A \$ % & - B \$ % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ 1 % 5 Tanya Rathbun Sorrell, M.A.

G # " F 02/02/2008

X ( & ' % , 1 # " % & ? G D # ' \$

### Significance (continued):

At the close of World War II, the City of Riverside, and Southern California generally, experienced an unprecedented boom in new construction. Returning GIs took advantage of low federally-funded mortgage loans to purchase new homes, further increasing the backlog of new construction that was initially created by the Great Depression and war effort. Builders constructed vast tracts of California Ranch style residences, commercial developers expanded on the concept of regional commercial centers, and City governments scrambled to establish new services to support their expansion. New technologies that were developed in conjunction with the war effort made modern building techniques and design both affordable and attractive to the general public.

The City of Riverside felt the postwar pressure for expansion acutely due to its proximity to March Air Force Base. Enlisted men, their families, and civilian employees in support services settled throughout Riverside. New industries seeking lucrative defense contracts and other work in the expanding postwar economy located their plants in Riverside, selecting lots in the widely promoted Hunter Industrial Park, along the ATSF railroad tracks near Downtown, and in areas west of Riverside like La Sierra and Arlanza. They selected Riverside partially because of the City's reputation as one of the best places to live (*Press Enterprise* 5/4/1958), which they believed would attract stable, skilled employees. In 1953, the *Press Enterprise* reported that Riverside was fourteenth among the fastest growing cities in the western United States (*Press Enterprise* 9/28/1953). In 1955, Riverside received the title "All American City" from the National Municipal League, which drew the attention of expanding industries such as the Lily Tulip Cup Corp (*Press Enterprise* 5/4/1958). From 1940 to 1960, the population within Riverside city limits more than doubled, adding 49,636 new residents (Census 1940-1960).

In response to the de-facto expansion happening in and around the City, Riverside City Council launched a Capital Improvements Program in the early 1950s, a major effort to improve City services. In 1952, the City put a \$440,000 bond measure on the ballot for the construction of a new fire station to replace the original downtown station on Eighth Street (now University Ave) (*Press Enterprise* 11/14/52). To sell the bond measure (called Proposition 2) to Riverside voters, the City commissioned local architect Herman Ruhnau to create a conceptual drawing of the new fire station, with bold rectangular forms intersecting to create engine bays, a hose tower composed of dramatic horizontal louvers and a poured concrete shell framing the office (ibid). Voters apparently did not approve the bond measure because the City came back to the voters in 1955 with a \$665,000 bond measure for the new downtown fire station and two substations in the City. Voters approved this measure in April 1955 (*Press Enterprise* 6/17/1955).

Although Herman Ruhnau had prepared conceptual drawings for the new fire station in 1952, the Council chose to award a contract for the design of all three fire stations to architect Bolton C. Moise, Jr. The style and architectural detail of Moise's fire station was similar to Ruhnau's concept, but instead of making the office a focal point he suspended the fireman's quarters over the office, supported by thin metal poles. Instead of using plaster and poured concrete throughout, Moise faced the office and engine bays in low-profile bricks, which had become a popular material in mid-century Modern architecture. Cal Construction Company broke ground on the new fire station in April 1956, and finished the building by March 1957. The final cost was about \$340,000 (*Press Enterprise* "Dream Come True" 3/23/1957).

The *Press Enterprise* reported on the public's excitement over the grand opening of Central Fire Station. On March 26, 1957, the City held an all-day open house to, as Riverside Fire Chief Ray Allen put it, "be open for the inspection of the general public, the people who are paying for the station" (*Press Enterprise* "Dream Come True"). The Ladies Auxiliary of the Riverside Fire Department provided refreshments for hundreds of visitors, who came from all over Riverside to see inside the "sparkling new building" (*Press Enterprise* "Crowds Visit New Station" 3/26/1957). The City Council and Mayor interrupted their morning session to participate in the ribbon-cutting ceremony and formal dedication. In his comments, Mayor Dales expressed that "this is something that we've been looking forward to for a long time. We are extremely proud of this beautiful - and functional - building" (ibid).

The design of Central Fire Station incorporated all of the modern necessities and conveniences made possible by postwar technology. Far removed from the horse-drawn fire engine of the late 19th and early 20th centuries, the modern fire station needed larger bays to accommodate fire engines that carried their own pumps, hoses, and ladders. Radio technology developed for WWII became central to a more organized emergency response in the office. The architectural floor-plan of fire stations changed to better reflect the wide variety of uses needed under one roof. Dormitory and living quarters became better integrated with modern kitchen and bathroom conveniences (Zurier 1982).  
(continued)

**Significance (continued):**

Prior to the 1955 bond measure, the last fire station constructed in Riverside was in 1937 at the corner of 8<sup>th</sup> and Franklin Streets in the Eastside neighborhood. Now demolished, this station was Spanish Colonial Revival in style, and continued the traditional form of early 20th century fire stations (Lewis and Moses 1983). When Central Fire Station opened it was both functionally and stylistically a significant departure from earlier fire stations because it incorporated modern technology and conveyed a sense of urban modernity to the City's urban core. The other two stations constructed at this time also incorporated modern technology and referenced the modern idiom in their architecture, but their suburban setting restricted their scale and architectural style. In the 1962 the City constructed additional stations in the Eastside and Magnolia Center neighborhoods. These were also modern in character with the latest in fire suppression and communication technology, but stylistically are more residential in character to fit in with their suburban settings. Within the past ten years the City has returned to using a more blocky, urban massing for new fire stations, but changes in style and technology have eliminated the use of once common features like sliding poles and hose towers.

Moise built two other fire stations in Riverside in 1955, under the same contract to the City as Central Fire Station. One is located at 6963 Streeter Avenue near Arlington Avenue (now closed and boarded-up), and the other one is 2239 Main Street near Russell Street (recently demolished). Both of these substations exhibited architectural details popular in Mid-Century Modern styles like grid-aligned windows, low profile brick veneer, and asymmetry in the form. However, because of their smaller size and proximity to neighborhoods, Moise designed these stations with a more residential character as opposed to the urban character of downtown.

In addition to its role in fire suppression downtown, Central Fire Station served as the administrative center of the City Fire Department, providing space for administrative staff, the Division of Fire Prevention, the Alarm Division and Alarm Center, maintenance shops, and the office of the Fire Chief (*Press Enterprise* "Dream Come True" 3/23/1957). Some of these additional functions were housed on the first floor of the dormitory/administrative wing, a cube-shaped mass attached to the rear of the station office.

In October of 1958, Pittsburgh Plate Glass ran an article in their promotional newsletter about Central Fire Station, describing it as a "Push Button Fire Station ... a new concept in the design of a fire station" (PPG Products, October 1958). Amidst glowing prose about the advances of the modern fire station in terms of radio technology, heating and air conditioning, and chrome plating on fire engines, the newsletter cited one "major departure in station house design." Moise restricted second-floor access from the fireman's quarters to the apparatus room to a row of sliding poles on one side, rather than creating access from both sides. This meant that the fireman's quarters did not need to sit directly over the apparatus room, reducing construction costs and eliminating the need for column supports in that part of the fire station (ibid).

**International Style Architecture**

Derived from the International style of architecture developed in Europe by architects such as Walter Gropius, Mies Van der Rohe, and Le Corbusier beginning in the early 20<sup>th</sup> century, the International style received its name from exhibit materials created by Art Historians Henry Russell Hitchcock and Philip Johnson for the 1932 International Exhibition of Modern Architecture at the Museum of Modern Art in New York City (Curtis 1996). The style is defined by clean, geometric planes, use of glass, brick, and concrete to create volume and define space, and a unification of interior and exterior living areas (Gleye 1981; Gebhard & Winter 1985). The movement was influenced heavily by Cubism, De Stijl and Expressionism in painting; some architecture writers have even suggested that the International style is Cubism and De Stijl applied to architecture (Frampton 1992, Curtis 1996). Although the International style did not become the dominant form of architecture internationally, the modularity of its architectural elements and the emphasis on connecting indoor and outdoor space allowed a nearly universal application of the style to varying terrains and climates.

In the early 1920s, Viennese architects Rudolph Schindler and Richard Neutra immigrated to Southern California to work with Frank Lloyd Wright, and soon after designed homes that became known as the earliest examples of the International style in California (Gleye 1981, Gebhard and Winter 1965). The International style flourished in the southern California architectural scene of the 1930s, especially for residences in the Hollywood and Silverlake areas of Los Angeles. The style spread from residences to apartments within the late 1930s and 1940s (ibid). While International-style residential architecture continued to fare well in southern California, the International style did not influence commercial and institutional architecture as it had in Europe until after World War II. (continued)

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % 3 = ! % 3 : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 B \_\_\_\_\_

@ / > B 115318 \_\_\_\_\_

- + \* , & A # ) \_\_\_\_\_

8 # 4 \$ 7 & ' 9 \_\_\_\_\_

! / \$ 0 & + 2 \$ % # A \$ % & - B % \$ & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G # " " F 02/01/2008

X ( & ' % , 1 # " % & ? G D # ' \$

### Significance (continued):

While better-known modern architects such as Craig Ellwood, William Pereira, and Welton Becket went on to make modernism a household word throughout post-WWII southern California, several modern architects focused on designing modern buildings in Riverside. As the County seat and the site of considerable residential expansion, Riverside had plenty of institutional contracts for local architects like Bolton Moise and Herman Ruhnau. Through the 1950s and 60s, Moise designed the City's Main Branch Library [1965] and three fire stations [1955-57], while Ruhnau designed the County Probation building [1960], Marcy Branch Library [1958], and the Police Station [1965]. These were all constructed in a Mid-Century Modern vernacular, but mostly reflected other styles like New Formalism or Corporate Modern.

Bolton C. Moise, Jr., A.I.A. came to inland southern California after he was discharged from the U.S. Army in 1946. The following year, he set up his practice in downtown Riverside, and over the following 23 years he designed many prominent public and educational buildings, including the Main Branch of Riverside Public Library, portions of Ramona High School, Polytechnic High School, and several elementary schools in Riverside and Imperial counties. (*Press Enterprise* "Architect of Riverside Landmarks Dies at 84" 11/11/1984) Prior to his service in World War II, Moise had been a practicing architect in the northeastern U.S. He graduated from Harvard University School of Architecture in 1931 and spent two years studying in Paris under architect Eduard Leon. When he returned he helped design the New York Museum of Modern Art, the interior of the Communications Building at the New York World's Fair in 1939, and several residences and apartments in Boston. He also worked for some time as a designer for General Motors (ibid). (continued)

In the 1950s and 60s, Riverside School District also underwent a major expansion of their facilities, and they hired both Ruhnau and Moise along with Los Angeles-based architects to construct modern schools. Early in the 1950s, Westwood-based architect Milton Caughey designed several elementary schools in Riverside using International-style form and architectural detail. For Pachappa and Monroe Elementary schools Caughey won awards from the American Institute of Architects (AIA). In 1956, Caughey, Moise, Ruhnau, and Henry Wright (part of the firm who designed the IBM building at 3610 14th Street) teamed together to design Ramona High School, which exhibits several International-style buildings. Bolton Moise went on to design Poly High School in 1964, using some International-style form and detail. The California School for the Deaf in Riverside referenced the International style in several of the buildings on their campus, which was constructed in 1951 (architect not known). In addition, Albert Frey and other notable architects designed several buildings at the University of California, Riverside in the 1950s and 60s using Mid-Century Modern vernacular, referencing New Formalism and International in particular.

Though the International style was popular in Riverside for primary, secondary, and college campus buildings, these are dispersed around the City. There are few, if any, other examples of the International style applied to an institutional building in Riverside's downtown. Most of the other Mid-Century Modern institutional buildings constructed in Riverside appear to be inspired more by the design elements of New Formalism and Corporate Modern, which use some of the same architectural details as the International style but in a way that emphasizes symmetry, balance, and grid-like geometry (Whiffen 1992). The Press-Enterprise office [1954, Herman Ruhnau] stands as the best commercial example of the International style in downtown Riverside, with an asymmetrical breakdown of the facade into a flat marble plane on one side and a rectangular porch-like space created by a row of right-angled beams on the other side.

According to architectural historian Marcus Whiffen, the International style is characterized by a complete absence of ornament, an emphasis on volume and asymmetry over mass and weight in the composition, flat roofs, smooth uniform wall surfaces, windows with minimal exterior reveals, and windows that turn the corner of the building (Whiffen 1992). The style commonly employs cantilevered and *pilotis*-supported overhangs for upper floors and balconies.

Central Fire Station exhibits many character-defining features of the International style, particularly in the deconstruction of the building's functions into intersecting geometric forms, horizontal bands of windows, and the use of brick and smooth plaster to define space. The overhang supported by *pilotis* that characterizes the station office is a particularly distinctive element of the fire station that defines the entryway space below it and creates a dynamic relationship with the sidewalk. It is reminiscent of Le Corbusier's *Villa Savoye*, constructed over a quarter of a century earlier. Milton Caughey also used this distinctive overhang style in the Barry Building in Brentwood, the year before Caughey and Moise worked together on Ramona High School and two years before Moise designed Central Fire Station. The louvered rectangular screens on the west side and rear elevations are important decorative elements common to the International style in the post-WWII era.

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 - 9 7 : - % < % / 3 = ! % : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 B

@ / > B 115318

- + \* , & A # )

8 # 4 \$ 8 & ' 9

! / \$ 0 & + 2 \$ % # A \$ % & B % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G # " F 02 // 2008

X ( & ' % , 1 # " % & ? G D # ' \$

## References (continued):

Caughey, Diane. City of Los Angeles Historic Cultural Monuments Nomination for the Barry Building. On File, City of Los Angeles Office of Historical Resources. March 24, 2007.

City of Riverside Building Permits, Planning Department Address Files. Accessed 12/14/2007.

Curtis, William J. R., *Modern Architecture Since 1900*. Oxford, Phaidon Press 1996. Third Edition.

Frampton, Kenneth. *Modern Architecture: A Critical History*. London: Thames & Hudson Ltd, 1992

Gebhard, David, and Robert Winter

*A Guide to Architecture in Southern California*. Los Angeles: Los Angeles County Museum of Art, 1965.

*Architecture in Los Angeles*. Salt Lake City: Peregrine Smith Books, 1985

Gleye, Paul. *The Architecture of Los Angeles*. Los Angeles: Rosebud Books, 1981

Henry Russell Hitchcock and Philip Johnson. *The International Style*. Reissue from original exhibition book from 1932. New York, W.W. Norton and Company, 1995.

Lewis, Richard and Vincent Moses. *A Century of Service: A Pictorial History*. Riverside, The Riverside Firemen's Benefit Association, 1983.

The Los Angeles Fire Department Historical Archive. <http://www.lafire.com>. Last Accessed December 28, 2007.

*The Press Enterprise*, Riverside, California. On File, Riverside Local History Resource Center, Riverside Public Library.

"Old Fire Station Unsafe, Decrepit." 11/14/1952

"Fire Station Construction Planned." 6/17/1955

"Dream Come True: New Central Fire Station Dedication Includes Public Open House Program." 3/23/1957.

"Crowds Visit New Fire Station." 3/26/1957

"Lily Cup Plant Opens Today." 5/4/1958

"Architect of Riverside Landmarks Dies at 84" 11/11/1984

Pittsburgh Plate Glass Company. "Push Button Fire Station." In *Pittsburgh Plate Glass Products*. October 1958. On File, Riverside Local History Resource Center, Riverside Public Library.

Sharp, Dennis. *A Visual History of Twentieth-Century Architecture*. New York Graphic Society, Ltd, 1972.

Whiffen, Marcus. *American Architecture since 1780*. Second edition published by the Massachusetts Institute of Technology, 1992.

Zurier, Rebecca. *The Firehouse: An Architectural and Social History*. New York: Abbeville Press, 1982.



!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % % = ! % : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 % B \_\_\_\_\_

@ / > B 115318 \_\_\_\_\_

- + , & A # ) \_\_\_\_\_

8 # 4 \$ 9 & ' 9 \_\_\_\_\_

! / \$ 0 & + 2 \$ % # A \$ % & 7 % \$ % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G # " F 02/01/2008

X ( & ' % , 1 # " % & ? G D # ' \$

### Photographs (continued):

View to the northeast, rear elevation (1/7/2008)



View to the east, side elevation (1/7/2008)





## Attachment B: Curriculum Vitae

## JENNA SNOW



In January 2015, Jenna Snow launched an independent historic preservation consulting practice with offices in Los Angeles. With twenty years of professional experience, Ms. Snow has a strong and broad understanding of best historic preservation practice, including federal, state, and local regulations. Throughout her career, Ms. Snow has authored, co-authored, and/or served as project manager for over 100 historic preservation projects, including a wide variety of historic resource assessments, National Register, California Register, and local nominations, as well as historic resources surveys. She regularly contributes to environmental impact reports, historic preservation certification applications, Section 106 reviews and other work associated with historic building rehabilitation and preservation planning. For five years, she served on the board of the South Carthay Historic Preservation Overlay Zone in mid-city Los Angeles.

### EDUCATION

Columbia University in the City of New York, Master of Science in Historic Preservation, 2002

Brandeis University, Bachelor of Arts in Fine Arts, 1998

### QUALIFICATIONS

Secretary of the Interior's Professional Qualifications Standards in Architectural History

LEED GA

### AWARDS

Rosalind W. Levine Prize for excellence in Fine Arts, June 1998

### COMMUNITY INVOLVEMENT

Secretary, South Carthay Historic Preservation Overlay Zone Board, 2011-2016

Pick Leader, Food Forward, 2011-present

Los Angeles Conservancy ModCom Working Group, 2013-2014

Guest Editor, *The Next American City*, Fall 2006, Issue 12

New Orleans recovery team from Western Regional Office of the National Trust for Historic Preservation, February 2006

### PROFESSIONAL EXPERIENCE

Jenna Snow, Historic Preservation Consulting, January 2015-present

Chattel, Inc., Los Angeles, CA, July 2002 – December 2014

International Council on Monuments and Sites, Transylvania Trust Foundation, Cluj-Napoca, Romania, Fall 2004

Neighborhood Preservation Center, New York, NY, Spring 2002

New York City Department of Design and Construction, Historic Preservation Office, New York, NY, Summer 2001

The Freedom Trail Foundation, Boston, MA, January 1999 - October 1999

### SELECTED PROJECTS

Temple Ohave Israel (Brownsville, PA) – Prepared a National Register nomination for a 1919 synagogue located in a small, economically depressed town of western Pennsylvania. The synagogue, significant as an anchor for the small, but influential Jewish community of Brownsville, PA, was listed in the National Register in February 2016. Listing in the National Register makes the property eligible for state grants to maintain the building, including replacement of a much needed roof.

Hawk House (Los Angeles, CA) – Prepared a successful Historic Cultural Monument nomination for a 1939 single family residential house designed by renowned Los Angeles architect Harwell Hamilton Harris for Stan and Ethyl Hawk. The house served as the headquarters for the furnishing company "Hawk House."

Chuey House (Los Angeles, CA) - Prepared a Historic-Cultural Monument nomination for a single family residence designed by one of the most influential Los Angeles architects, Richard Neutra, in 1956. As the property was for sale, the house was threatened with demolition. While the nomination was ultimately withdrawn, it served as a negotiation tool for the Los Angeles Conservancy.

Frank's Camera (Los Angeles, CA) – Completed a Historic Structures Report in support of a Mills Act Contract for a former S.H. Kress & Co., a five-and-dime-store. A contributor to the Highland Park-Garvanza Historic Preservation Overlay Zone, the building was constructed in 1928 and is undergoing a rehabilitation to convert the building to smaller retail spaces. The building serves as a visual and economic anchor to the revitalizing commercial strip along North Figueroa.

Monday Women's Club (Los Angeles, CA) - Prepared a historic resource assessment for a black women's club in the Venice neighborhood. Moved to the site in 1926, the building on the property was proposed for demolition. Worked with the project team on a focused EIR that studied alternatives.

**Additional Projects:**

Commodore Apartments (Los Angeles, CA) - Process Investment Tax Credit application for a 1926 Hollywood apartment building that completed a major rehabilitation project. The rehabilitation carefully restored the primary façade, which had experienced multiple alterations over the years.

West Los Angeles Veteran's Affairs (Los Angeles, CA) – Between 2010 and 2014, prepared Section 106 review and consultation for the first of 11 buildings that are undergoing seismic retrofit and limited rehabilitation. The buildings will be reused to house veterans who are homeless. The rehabilitation won a Los Angeles Conservancy award. Also prepared a successful National Register nomination for the whole campus, which was listed in November 2014. Work was done at Chattel, Inc. as a subconsultant to Leo A. Daly.

West Los Angeles Veteran's Affairs Building 205 and Building 208 (Los Angeles, CA) - Process Investment Tax Credit application and Section 106 review for two buildings out-leased to a nonprofit developer. The two buildings will be rehabilitated to house homeless veterans. Work is estimated to be complete in 2021.

Boyle Hotel/Cummings Block (Los Angeles, CA) – Completed Investment Tax Credit Application and National Register nomination for 1898 hotel in Boyle Heights neighborhood of Los Angeles. The building has been reused to house low-income residents of Boyle Heights and has been a catalyst for economic rehabilitation in the neighborhood. The rehabilitation won a Los Angeles Conservancy award, as well as a National Preservation Honor Award. Work was done at Chattel, Inc. for the East Los Angeles Community Corporation.

Breed Street Shul Project, Inc. – Project Manager for Phase 1 seismic stabilization and stained glass window restoration. Provided design review and construction monitoring and prepared historic review documentation for local environmental review. Consulted with federal agencies on Section 106 compliance for a FEMA grant and a federal appropriation. Work was done at Chattel, Inc.

Historic Resources Survey Update (Los Angeles, CA) - Served as the project manager for preparation of historic context statements and intensive-level historic resource survey. The survey were prepared in close coordination with the Los Angeles Office of Historic Resources to dovetail into SurveyLA. Surveyed approximately 3,000 properties, including property-specific research on approximately 400 of these properties. Attended several public hearings at both the beginning and end of the process, as well as presented at nearly a dozen neighborhood council meetings. Work was done with Chattel, Inc.

Judson Rives Building (Los Angeles, CA)– Completed Investment Tax Credit Application for a 1908 office building in downtown Los Angeles, a contributing resource to the Broadway Historic District that was converted to residential use. Work was done at Chattel, Inc.

Hollywood Profession Building (Los Angeles, CA) - Completed Investment Tax Credit Application for a 1926 office building on Hollywood Boulevard. The building is significant not only for its distinctive Neo-Gothic style, but also with for its association with former United States President Ronald Reagan. The office building was converted to residential use. Work was done for Chattel, Inc. for CIM Group.

Residential Survey (Whittier, CA) - Prepared a historic context statement focusing on architectural contexts and themes connected with residential development in Whittier. Feld surveyed approximately 1,540 properties generally constructed prior to 1941 using an Access database incorporating GIS mapping to collect survey data in the field. The survey was prepared in close coordination with the City of Whittier staff and Historic Resources Commission and was adopted by the City of Whittier in 2015. Work was done with Chattel, Inc.

SurveyLA City of Los Angeles (Office of Historic Resources) – Participated in completing a historic resource survey of over 97,000 properties in South and Southeast Los Angeles. Co-authored historic context statement of Los Angeles' industrial history. Work was done at Chattel, Inc.

# EXHIBIT C

**EXHIBIT C:  
INCONSISTENCIES WITH PLAN OBJECTIVES AND POLICIES**

<b>I. GENERAL PLAN</b>	
<b>A. Land Use and Urban Design</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Objective LU-48:</i> Strengthen the identity and character of Downtown using the existing historic and architectural urban character of the community, while allowing for new structures that are architecturally compatible with and complementary to the existing architectural and historic fabric.</li> <li>• <i>Policy LU-48.1:</i> Encourage mixed-use development with a strong residential presence, including both new construction and the conversion of upstairs spaces in existing buildings.</li> <li>• <i>Policy LU-48.3:</i> Create a sense of arrival at key Downtown gateways, reinforcing the City's natural, cultural and historic characteristics.</li> <li>• <i>Policy LU-48.5:</i> Encourage housing beyond the traditional residential neighborhoods as a means of making Downtown a twenty-four hour neighborhood.</li> <li>• <i>Policy LU-48.6:</i> Provide a variety of housing options, including medium- and high-density apartments and condominiums, live/work loft space and mixed-use buildings with significant residential components.</li> </ul>	<p>Contrary to the implementing policies, the Project does not include residential uses or create a sense of arrival at a key Downtown gateway. (Policies LU-48.1, LU-48.3, LU-48.5, LU-48.6.) It detracts from the City's cultural and historic characteristics by being incompatible with the mass, scale, size, and proportions of the buildings within its immediate vicinity. (LU-48.3.)</p>
<b>B. Circulation Community Mobility Element</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Objective CCM-13:</i> Ensure that adequate on- and off-street parking is provided throughout Riverside.</li> <li>• <i>Policy CCM-13.1:</i> Ensure that new development provides adequate parking.</li> </ul>	<p>Per Code, the Project is short 82 parking spaces. Contrary to the General Plan, the City has not applied parking regulations so as to avoid increased traffic volumes and congestion. (General Plan, p. CCM-35.)</p>
<b>C. Noise Element</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Objective N-1:</i> Minimize noise levels from point sources throughout the community and, whenever possible, mitigate the effects of noise to provide a safe and healthful environment.</li> </ul>	<p>The General Plan and Riverside Municipal Code ("RMC") limit noise levels to the maximum permitted exterior noise level for the affected use. (General Plan, p. N-13; RMC, Chapter 7.25.) The maximum</p>

<ul style="list-style-type: none"> <li>• <i>Policy N-1.3</i>: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.</li> </ul>	<p>exterior levels for office/commercial uses is 65 dBA at any time. (RMC, Table 7.25.010A.) The Environmental Checklist (“EC”) states that construction noise levels would exceed 65 dBA at 3 of the 5 receiver locations.<sup>1</sup> (EC, p. 11 and Exh. D, Table 7-3.) The Project conflicts with the General Plan and results in significant but undisclosed noise impacts.</p>
<p><b>D. Historic Preservation Element</b></p>	<p><b>Project is Inconsistent with Plan Objectives and Policies</b></p>
<ul style="list-style-type: none"> <li>• <u>Objective HP-1</u>: To use historic preservation principles as an equal component in the planning and development process.</li> <li>• <i>Policy HP-1.1</i>: The City shall promote the preservation of cultural resources to ensure that citizens of Riverside have the opportunity to understand and appreciate the City’s unique heritage.</li> <li>• <i>Policy HP-1.2</i>: The City shall assume its direct responsibility for historic preservation by protecting and maintaining its publicly owned cultural resources.</li> <li>• <i>Policy HP-1.5</i>: The City shall promote neighborhood/city identity and the role of historic preservation in community enhancement.</li> <li>• <i>Policy HP-1.6</i>: The City shall use historic preservation as a tool for “smart growth” and mixed use development.</li> <li>• <u>Objective HP-4</u>: To fully integrate the consideration of cultural resources as a major aspect of the City’s planning, permitting and development activities.</li> </ul>	<p>If approved, the Project may result in substantial adverse changes to the Historic Fire Station, six other historic resources in the vicinity, and two historic districts. The mass, scale, size, and proportions of the Project are incompatible with historical structures in its immediate vicinity. Such impacts have been documented by Jenna Snow and at least two other expert historic preservation consultants.</p> <p>The Project failed to secure approval of Certificate of Appropriateness (“COA”) from the City’s Cultural Heritage Board (“CHB”). Board members in opposition cited the Project’s massing, scale, size, and visual impact.<sup>2</sup></p> <p>As noted in report from GPA Consulting, the Project’s increased height is incompatible with surrounding historic resources and would block existing view corridors of the bell tower on the First Congregational Church of Riverside, a</p>

<sup>1</sup> The construction noise and related impacts are likely understated given that the EC assumed a 12 month construction period whereas the actual construction period appears to be 28-30 months. (EC, p. 16; Project Narrative, p. 3.) Further, to the extent RMC Section 7.35.020 purports to exempt construction noise from the above standards, it is inconsistent with the General Plan and invalid.

<sup>2</sup> Board Member McDaniell pointed out that there had been no study of the immediately adjacent historic resources. (RMC § 20.25.050 [in order to approve COA, Board must find that the application is consistent or compatible with existing adjacent or nearby cultural resources and their character-defining elements].) Board Member Tobin expressed concern with the lack of line-of-site and massing studies especially “given this is the most important location within the Mission Inn and Seventh Street Historic District[s].” (Minutes, CHB, April 21, 2021, p. 4.) He suggested a continuance so that the applicant could provide such studies, both for the current 8-story elevation and the originally proposed 4- to 5-story elevation. The Project applicant declined a continuance to prepare such studies and instead called for a yes or no vote on the COA.

<ul style="list-style-type: none"> <li>• <i>Policy HP-4.1:</i> The City shall maintain an up-to-date database of cultural resources and use that database as a primary informational resource for protecting those resources.</li> <li>• <i>Objective HP-5:</i> To ensure compatibility between new development and existing cultural resources.</li> <li>• <i>Policy HP-5.1:</i> The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.</li> <li>• <i>Objective HP-7:</i> To encourage both public and private stewardship of the City’s cultural resources.</li> <li>• <i>Policy HP-7.1:</i> The City shall apply code enforcement, zoning actions, and building safety/construction regulations as tools for helping to protect cultural resources.</li> <li>• <i>Policy HP-7.2:</i> The City shall incorporate preservation as an integral part of its specific plans, general plan, and environmental processes.</li> <li>• <i>Policy HP-7.3:</i> The City shall coordinate historic preservation with other activities within its government structure.</li> </ul>	<p>character-defining feature of this historic resource.<sup>3</sup> Height limits and other development standards were intended to preserve the view of historic buildings along Mission Inn Avenue from the vantage point of the Riverside 91 Freeway. (Downtown Specific Plan, Policy UD-1-6.)</p> <p>The Project is inconsistent with the General Plan and may cause a substantial adverse change in the significance of historical resources as well as related aesthetic impacts.<sup>4</sup></p>
<b>II. DOWNTOWN SPECIFIC PLAN</b>	
<b>A. Vision, Goals, and Policies</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Policy LU-1.1:</i> Design philosophy emphasizes new and infill construction that is compatible with the historic structures that give Downtown its unique identity.</li> <li>• <i>Policy LU-5:</i> Provide incentives for infill development throughout Downtown, and with an emphasis on the key opportunity sites identified in this plan.</li> <li>• <i>Policy LU-6:</i> Place a strong emphasis on supporting, preserving, and expanding the Raincross District as a major center for culture, learning, and the arts.</li> </ul>	<p>The Project is not compatible with the mass, scale, size, and proportions of the historic structures in the vicinity. Rather than supporting the District as a major center for culture and the arts, the Project detracts from it by not respecting its rich store of historic buildings. The Project does not serve the needs of residents or create round-the-clock vibrancy. The Project has a 1-foot setback instead of the 15-foot setback required and appears to provide none of the pedestrian amenities or features called for on Mission Inn Avenue,</p>

<sup>3</sup> In the brochure entitled “Historic Districts of Riverside,” the First Congregational Church is identified as a “major focal point” of the Mission Inn Historic District.

<sup>4</sup> (See, e.g., *Protect Niles Canyon v. City of Fremont* (2018) 25 Cal.App.5th 1129 [EIR required due to project’s visual impact on a surrounding official historical district].)

<ul style="list-style-type: none"> <li>• <i>Policy LU-10</i>: Encourage the establishment of a vibrant mix of uses that will serve the needs of both residents and visitors and will help create a vibrant daytime, evening, and weekend environment.</li> <li>• <i>Policy LU-11</i>: Promote the expansion of the convention center and related hotel uses to support increased convention and tourist activity.</li> <li>• <i>Policy LU-12</i>: Maintain a continuity of pedestrian activity through active retail and restaurant ground level uses along Mission Inn Avenue, Main Street and University Avenue. (<i>Accord, Policy C-1-11</i> [Provide for pedestrian circulation at ground level]; and DSP, p. 19-11 [designating Mission Inn Avenue as a pedestrian oriented street and calling for provision of benches, street furniture, shade trees and related amenities].)</li> </ul>	<p>a designated pedestrian-oriented street. The Project site and other nearby parcels are designated for mixed residential/commercial development, not a hotel. Instead, the Raincross Square area is envisioned for such development. See discussion below.</p>
<ul style="list-style-type: none"> <li>• <u>Goal UD-1</u>: Strengthen the identity and character of Downtown using the existing historic and architectural urban character of the community, while allowing for new structures that are architecturally compatible with, and complementary to, the existing architectural and historic fabric.</li> <li>• <i>Policy UD-1-1</i>: Through design review, ensure that new development enhances the character of the Downtown Districts by requiring design qualities and elements that contribute to an active pedestrian environment, where appropriate, and ensuring that architectural elements are compatible and in scale with the existing historic structures in the Downtown.</li> <li>• <i>Policy UD-1.6</i>: Establish development standards to preserve the view of historic buildings along Mission Inn Avenue from the vantage point of the Riverside 91 Freeway.</li> </ul>	<p>As noted in the reports from the expert historic preservation consultants, the Project is not architecturally compatible in scale with or complementary to the existing architectural and historic fabric. With essentially a zero lot line, the Project does not contribute to an active pedestrian network. As explained above, the Project may significantly alter the important viewshed of historic buildings along Mission Inn Avenue from the 91 Freeway, including the bell tower on the First Congregational Church.</p>
<ul style="list-style-type: none"> <li>• <u>Goal HP-1</u>: Strengthen and enhance the historic character of Downtown Riverside, which is unique to the Inland Empire, through the preservation and maintenance of Downtown's historically significant sites and structures.</li> <li>• <i>Policy HP-1-4</i>: Through design review, encourage new development to be compatible</li> </ul>	<p>The Project may result in a substantial adverse change to the Historic Fire Station and several other historical resources. The Project is not compatible with adjacent historical structures in scale, massing, building materials, and general architectural treatment. See above.</p>



with adjacent historical structures in scale, massing, building materials, and general architectural treatment.	
<b>B. Raincross District<sup>5</sup></b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <u>Section 6.5 Development Standards for the Raincross District</u>: To ensure compatible development with the historic buildings in the Mission Inn Historic District, the maximum allowable height and maximum allowable density in this area is lower than for development in the remainder of the Raincross District.<sup>6</sup></li> <li>• <i>Section 6.5.1.B Maximum Floor Area Ratio Within the Mission Inn Historic District</i>: The maximum floor area ratio (“FAR”) shall be 3.0; FAR may be increased up to 4.5 with the approval of a Conditional Use Permit, provided the proposed use specifically support the purpose and intent of the Raincross District and is compatible with surrounding development and design.</li> <li>• <i>Section 6.5.3.B Maximum Height Within the Mission Inn Historic District</i>: 100 feet, provided that anything over 60 feet requires the approval of a Conditional Use Permit and must specifically support the purpose and intent of the Raincross District and be compatible with surrounding development and design.</li> <li>• <i>Section 6.5.5 Front Yard Setback</i>: For parcels that have frontage on Mission Inn Avenue between the 91 Freeway and Main Street, the minimum setback shall be 15 feet. The front</li> </ul>	<p>The Project greatly exceeds the height limit and also substantially exceeds the FAR limit. With essentially a zero lot line, it also fails to comply with the minimum setback requirement. Instead of carefully complying with the established development standards to ensure compatibility of development, the Project completely ignores them to achieve the room count desired.</p> <p>In approving a use permit, the Planning Commission made no findings as to the Project height and FAR limit, including the requisite finding that the Project supports the purpose and intent of the Raincross District and is compatible with surrounding development and design. There is no front yard setback with incorporation of hard and soft features, as specified. Even if it had made such findings, they would not be supported by substantial evidence.</p>

<sup>5</sup> The Downtown Specific Plan (“DSP”) describes the Raincross District as follows: “The Raincross District is the cultural, historic, and social center of both Riverside and the region beyond. The quality of Downtown Riverside’s historic buildings and the relationship between these buildings creates an historic urban fabric unparalleled in the region. The positive image and economic health of Riverside is strongly influenced by this historic character and the protection of that is an essential part of assuring Riverside’s economic health and growth into the future. . . . The center of the District is occupied by the Mission Inn Historic District, which contains Riverside’s most important historic buildings. In this sub-area the development standards have been carefully crafted to maintain a scale of development that is compatible with the well-established historic fabric of the district.” (DSP, Section 6-1; *accord*, Section 6.6.1 [“Historic and cultural resource sensitivity are the key concepts in this district. . . . New construction should be in scale and architecturally harmonious with nearby historic buildings.”].)

<sup>6</sup> (*Accord*, DSP Section 15.5 [“The historic architecture of the City is one of its most important resources and is maintained by the establishment and enforcement of guidelines for the treatment of historic buildings and structures in historic districts.”].)

yard setback should incorporate a combination of “soft” features, such as landscaping, water, etc. and “hard” features, such as pavers, ironwork fencing, etc. ( <i>Accord</i> , Section 6.6.2 [“For parcels with frontage on Mission Inn Avenue; architectural elements such as stairs or steps, and urban amenities such as benches, water foundations, and public art are encouraged.”].)	
<ul style="list-style-type: none"> <li>• <u>Section 6.6 Design Standards and Guidelines for the Raincross Districts</u></li> <li>• <u>Section 6.6.3 Architecture</u></li> <li>• <i>Style</i>: New buildings should be compatible with their historic neighbors in terms of massing, modulation, height, and setbacks.</li> <li>• <i>Scale</i>: (1) Buildings and improvements should be at a pedestrian scale. To maintain a sense of pedestrian scale, larger buildings should be broken into storefront bays about 25 feet wide. (2) The size and mass of a new building should blend with the surrounding district.</li> </ul>	<p>At 8-stories and over 200,000 square feet on a less than one acre lot, the Project is not compatible in terms of scale, massing, or height with its historic neighbors and is not designed at a pedestrian scale.</p> <p>The Project’s historical consultant cites the Stalder and Imperial Hardware buildings as examples of comparable projects. These projects are not comparable (see Snow Report) and were based on a report that contained a comprehensive analysis of various preservation alternatives. (DSP, p. 6-12 [citing the Donaldson report].) The DSP notes that similar studies should be done in connection with potential development of other sites containing historic buildings. (<i>Id.</i>) No such study was done here.</p>
<b>C. General Design Standards and Guidelines</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <u>Section 15.4 Architectural Design Standards</u></li> <li>• <i>Section 15.4.1 Massing, Form, and Scale (New structures, including Additions)</i>: (1) The size and mass of new structures, including additions, should be in relation to surrounding structures.</li> </ul>	The Project is inconsistent with these provisions. See above.
<ul style="list-style-type: none"> <li>• <u>Section 15.8.2 Building Mass, Scale and Form: Guidelines</u> (1) New structures should maintain the average scale of historic structures within the area.<sup>7</sup></li> </ul>	The Project is inconsistent with these provisions. See above.
<b>D. Parking Standards</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>

<sup>7</sup> (See also, DSP Section 15.7.5 [noting additions “should be compatible in size and scale to the original structure, although subordinate in massing” and should “use similar finish materials and fenestration patters as the original structure.”].)

<p><u>Section 16.2.4 Parking Requirements (Raincross and Justice Center Districts)</u></p> <ul style="list-style-type: none"> <li>• Hotel: 1:1 guest room, ancillary uses at 50% of Specific Plan requirement</li> <li>• General Office: 1:250</li> <li>• Retail: 1:375</li> <li>• Restaurant: 1:150</li> </ul>	<p>The Project is deficient in parking by 82 parking spaces and does not comply with these provisions.</p>
<p><b>E. Implementation</b></p>	<p><b>Project is Inconsistent with Plan Objectives and Policies</b></p>
<ul style="list-style-type: none"> <li>• Target Raincross Square for expansion of hospitality uses, specifically a 100-150 room hotel. (Section 21.1.1; see also DSP, p. 2-17 [noting the “development of up to 120-150 rooms near the freeway should be considered by the City, with possible support for additional rooms if the Raincross Square is expanded.]])</li> <li>• Encourage expansion of the Convention Center and development of a third hotel (Table 21A)</li> <li>• Development concepts are intended to reinforce the identities of Land Use Districts, e.g., hospitality uses concentrated on the Raincross Square in the Raincross District. (DSP, pp. 21-23 [“The existing Raincross Square and nearby hotels represent an important asset that should be expanded. It is recommended that the two blocks located north of the Holiday Inn Select and Raincross Square be targeted for expansion of the convention center and development of a third hotel.”].)</li> <li>• Table 21D (Profile of Opportunity Sites): listing Sites 1 and 2 for hotel and convention center expansion and Site 9 (containing the fire station, YMCA building, and surface parking lot) for mixed-use development, comprised of retail, restaurant, residential or office components.</li> </ul>	<p>The DSP identifies Raincross Square for development of a hotel of up to 150 rooms in conjunction with expansion of the Convention Center. It does not identify the Project site for hotel uses, but rather for mixed-use commercial/residential development. Additional hotel rooms were only to be considered if the Raincross Square were to be expanded. That area has not yet been expanded to include an additional hotel. Thus, the Project is inconsistent with the Implementation goals and policies of the DSP.</p>

Date: 8-17-21  
Item No.: 15

City Clerk of Riverside:

RE: Item 15 on today's council agenda. Please forward to all Council Members and the Mayor.

As Vice Chair of D.A.N.A. I would like to clarify the letter you received from Tom Donahue expressing that D.A.N.A. was in support of this project. First Tom is not a board member of D.A.N.A. therefor not our spokesperson.

This project was brought to D.A.N.A. in 2018, it was a 4-story hotel with use of the full fire station 1. The presentation was well received, and the members present voted to support this version of the project. Over the years the project has changed drastically. We had another presentation on the current look of the project before you today. At this time the members were extremely hostile to the overall project. If a vote would have been taken, the project would have had a position of **NON-SUPPORT**.

I feel you should know that the local residents who are in support of things making Downtown a better place, this project no longer is one of them. Please help us make Riverside better together and hear our comments on where we live, work, and do business.

Nanci Larsen  
D.A.N.A. Vice-Chair

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21

Item No.: 15

**From:** Don Morris <[mrhd\\_donmorris@icloud.com](mailto:mrhd_donmorris@icloud.com)>

**Sent:** Monday, August 16, 2021 10:34 PM

**To:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>

**Subject:** [External] ITEM 15 on the agenda

TO: City Clerk

RE: Please include this in the comments for Item 15 on the City Council Agenda for 8/17/21.

To The Members Of The City Council

I personally find even having to consider this proposed hotel project in this location repugnant. How could a city endowed with such a rich history even consider this as feasible. Allowing an oversized monstrosity such as this to be built in this location will literally be like sticking a dagger into the heart of Riverside. Parking is already scarce in downtown and this is asking for HALF the required parking places. What happens when there is a function at the Civic Auditorium across the street, and the Congregational church is having a function. What happens when the Festival of Lights, or other City festivals/activities take place. How many blocks away does the public have to park, because the people at the hotels took all the parking?

REALLY? Going to keep the non-historic facade of the former fire station to cover up an 8 story building? It's like putting lipstick on a pig. Riverside's a big city, and there's a place for those hotels, but it's NOT on a tiny footprint of ground on the most historic street of downtown. It's a travesty that the citizens of Riverside should have to voice their opinion to their representatives to have this project rejected.

The Planning Commission has already approved the variances AND the conditional use permit? Tell us again about how our city officials work to support historic preservation in Riverside. Better than that....this time, show us.

We're having a hard time believing you.

Don Morris

4736 Indian Hill Road

*50 year resident of Riverside*

cc Mayor

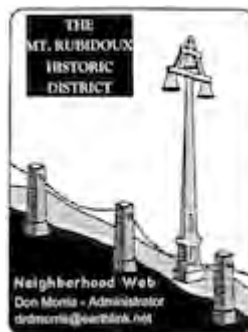
City Council

City Manager

City Attorney

ACMs

C&ED Director



Date: 8-17-21  
Item No.: 15

**From:** Molly A. Morris <[mollymorris819@gmail.com](mailto:mollymorris819@gmail.com)>

**Sent:** Monday, August 16, 2021 4:01 PM

**To:** CityClerkMbx <[City\\_Clerk@riversideca.gov](mailto:City_Clerk@riversideca.gov)>

**Subject:** [External] Regarding Tuesday's City Council meeting - appropriateness of AC Marriott

NO! ABSOLUTELY NOT is my vote on the proposed hotel for the heart of downtown Riverside. I am shocked that our City Council would even be considering such a proposal in this beautiful location containing historic Riverside's most beautiful architecture! And I heard that the variances on height, set back and parking have already been approved? This can't be true! The proposed building will FOREVER damage the heart of our beautiful city. I am sickened that the quest for tax revenue wipes out all common sense and eliminates your protection and guardianship of our historic and beloved city! Insist that this hotel project be put in another area of our city, not right in the heart of our history! Your job should be to protect our history not to diminish it.

Molly Morris, 49 year resident of Riverside

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21  
Item No.: 15

**From:** H. Vincent Moses-PhD <[vincate@att.net](mailto:vincate@att.net)>  
**Sent:** Tuesday, August 17, 2021 8:27:49 AM  
**To:** [city.clerk@riversideca.gov](mailto:city.clerk@riversideca.gov) <[city.clerk@riversideca.gov](mailto:city.clerk@riversideca.gov)>  
**Cc:** Patricia Lock Dawson <[patricia@patriciaforriverside.com](mailto:patricia@patriciaforriverside.com)>; Edwards, Erin <[EEdwards@riversideca.gov](mailto:EEdwards@riversideca.gov)>; Cate Whitmore <[vincate1@gmail.com](mailto:vincate1@gmail.com)>; Carol McDoniel <[cmcdonie@csu.fullerton.edu](mailto:cmcdonie@csu.fullerton.edu)>  
**Subject:** [External] New Hotel in two Historic Districts

Dear Madam Mayor and City Council:

RE: Proposed Hotel, Two Historic Districts and CEQA Review

My wife and I do not oppose the construction of a hotel on the proposed site. We do, however, urge you to understand that the current three times at variance plan will sit squarely within two designated Historic Districts: Mission Inn and Seventh Street Historic Districts. These Districts compose **one historic resource** and therefore fall directly under the provisions of CEQA. The probable adverse impact of this hotel must be fully and thoroughly investigated under CEQA, and requires a full EIR with proposed real mitigation measures to offset the adverse impact.

Most of the surrounding buildings are also listed on the National Register of Historic Places, including the First Congregational Church, the Riverside Art Museum, the Municipal Auditorium, the Universalist Unitarian Church and the Museum of Riverside. One block down sits the National Historic Landmark Mission Inn. The City must take the surrounding historic context into consideration as Council debates this project. We support a hotel, but suggest that the City will take a serious risk of a suit under CEQA should it move forward without full consideration of the impact this at variance hotel plan holds for its historic surroundings. Appropriate mitigation measures can make the project better, and work to lessen its impact on Riverside's vital historic Beaux-Arts Spanish Colonial Civic Center.

Thank you for your consideration of our point of view.

Best regards,

Vince & Cate

--

Herman Vincent Moses, PhD CEO & Principal VinCate & Associates Museum and Historic Preservation Consultants

cc Mayor  
City Council  
City Manager  
City Attorney  
ACMs  
C&ED Director

Date: 8-17-21

Item No.: 15

**From:** Steele, Krysten A. <[ksteele@buchalter.com](mailto:ksteele@buchalter.com)>

**Sent:** Monday, August 16, 2021 7:02 PM

**To:** Cervantes, Clarissa

**Subject:** [External] NO TO AC MARRIOTT W CURRENT VARIANCES

Please do not approve the development of this large hotel, the current plans for development to do represent the architectural climate of our beautiful down town area and will not only create a huge eyesore and block our sprawling historical downtown view but will also create a crazy amount of construction congestion and danger.

Please please please vote against the project as it currently stands.

Krysten Steele  
Ward 2

## Buchalter

---

**Krysten A. Steele**

Paralegal

T (213) 891-5492

[ksteele@buchalter.com](mailto:ksteele@buchalter.com)

---

1000 Wilshire Boulevard, Suite 1500

Los Angeles, CA 90017-1730

[www.buchalter.com](http://www.buchalter.com)

cc Mayor

City Council

City Manager

City Attorney

ACMs

C&ED Director

Notice To Recipient: This e-mail is meant for only the intended recipient of the transmission, and may be a communication privileged by law. If you received this e-mail in error, any review, use, dissemination, distribution, or copying of this e-mail is strictly prohibited. Please notify us immediately of the error by return e-mail and please delete this message and any and all duplicates of this message from your system. Thank you in advance for your cooperation. For additional policies governing this e-mail, please see <http://www.buchalter.com/about/firm-policies/>.





OLD  
RIVERSIDE  
FOUNDATION

P.O. BOX 601 • RIVERSIDE, CA 92502 • (951) 683-2725 • OLDRIVERSIDE.ORG

August 13, 2021

City Clerk  
City Hall  
3900 Main Street  
Riverside, CA 92522

Re: August 17, 2021 City Council Meeting, Agenda Item No. 15  
Cases P19-0560, P19-0562, and P19-0563

Honorable Mayor and Members of the City Council:

The Old Riverside Foundation (ORF) Board of Directors has been monitoring this project since it was first presented in 2018. The current project is significantly larger than the original proposal. Because of these changes, by vote of the Board, we oppose the proposed development. ORF's position is that projects should comply with the Downtown Specific Plan, which include setbacks and height restrictions. These conditions exist precisely to ensure that new development will be sensitive to its surroundings within a Historic District that is much cherished by the community and much promoted by the City itself.

In April, however, the Planning Commission granted variances to the Downtown Specific Plan, waiving the 60' height restriction and 15' required set-back from the sidewalk. As proposed, the hotel will be 93 feet tall, making it almost as tall as the First Congregational Church bell tower. With only a 1-foot setback, the hotel will rise up immediately adjacent to the sidewalk, effectively blocking views of downtown from the east. The Planning Commission also approved a decrease in the number of required parking spaces, from the required 226 to the proposed 144.

ORF is not opposed to all new development in Historic Districts, but it needs to be sensitive to its surroundings. This project, with the granted variances, will forever change the character of Riverside's downtown. It is too big, too close to the street, and inconsistent with the District's contributing structures. In addition, a project this large and this inconsistent with existing planning guidelines should not be exempt from the CEQA process. Without CEQA the project's impact on the City's Landmarks is unknown.

Old Riverside Foundation asks that the City Council reject the appeal by Greens Ehrenberg, LLC and deny approval of Planning Case P19-0563 Certificate of Appropriateness, and require the applicant to prepare the required environmental documents per CEQA for circulation and review. Our community and our landmarks deserve no less.

Sincerely,

Michael J. Gentile  
President  
Old Riverside Foundation

August 16, 2021

**VIA E-MAIL** [city\_clerk@riversideca.gov]

Riverside City Council  
3900 Main Street  
Riverside, CA 92522

Re: Appeal of Planning Commission's Approval of Environmental Determination, Conditional Use Permit, and Variances (P19-0560, P19-0561, P19-0562) and Appeal of Certificate of Appropriateness (P19-0563) for Proposed Development at 3420-3482 Mission Inn Avenue; August 17, 2021 City Council Agenda, Item No. 15

Dear Mayor and City Councilmembers:

This letter is sent on behalf of Mission District Associates, LLC and the Mission Inn Hotel & Spa ("Mission Inn"), which has operated in downtown Riverside since 1876. As both a National Historic Landmark and longtime member of the business community, the Mission Inn has a particular interest in the responsible redevelopment of the historic downtown area and the preservation of other historic buildings in the area. While the Mission Inn is not opposed, in principle, to the development of a hotel at 3420-3482 Mission Inn Avenue ("Site"), it is very disappointing to see the applicant has abandoned its original proposal for a 161-room hotel that would have properly preserved the historic Downtown Fire Station ("Historic Station") by incorporating it into the design of the new hotel. The dual branded 226-room project ("Project") proposed in its place is too large for the 0.95 acre Site, incompatible with its surroundings, and fails to preserve any of the interior features of the Historic Station.

Moreover, as explained further below and in the attached expert reports, the Project requires variances and conditional use permits that cannot be legally approved, and does not qualify for an exemption from the California Environmental Quality Act ("CEQA"). The Mission Inn thus joins its neighbors and many Riverside residents in urging the City Council to reject the Project, as currently configured, and send it back to the drawing board.<sup>1</sup>

---

<sup>1</sup> We hereby incorporate by reference into the administrative record for this proceeding all agendas, staff reports, transcripts, minutes, and videos, of any public hearing concerning the Site or the Project as well as any and all public records concerning the Site or the Project.

Riverside City Council  
August 16, 2021  
Page 2

**I. The City May Not Approve the Project Without Complying With CEQA**

- A. The Project does not qualify for the Class 32 infill exemption, because it requires variances.

CEQA requires that public agencies analyze whether a project might have any significant environmental impacts before granting any approval of such a project, unless the project is clearly shown to be “exempt” from CEQA. (CEQA Guidelines, § 15004(a).) While the CEQA Guidelines set forth exemptions for several categories of projects that have been determined not to have a significant impacts on the environment, such “categorical exemptions” “are construed narrowly,” in keeping with the requirement that CEQA “be interpreted in such manner as to afford the fullest possible protection to the environment.” (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 943-944, 966.) Further, a categorical exemption may **not** be relied upon where there is a reasonable possibility that an otherwise exempt project will have a significant effect on the environment, due to unusual circumstances. (CEQA Guidelines, § 15300.2(c).)

Here, the Planning Commission found the Project was categorically exempt from CEQA under Section 15332 of the CEQA Guidelines, which provides an exemption from CEQA for certain infill development projects that satisfy various specified conditions. Under the express terms of that exemption, however, a public agency may rely on Section 15332 only where, among other things, a project is shown to be “**consistent with** the applicable general plan designation and all applicable general plan policies as well as with **applicable zoning designations and regulations.**” (CEQA Guidelines, § 15332, *emph. added.*)

The Project cannot rely on the Class 32 exemption, because it indisputably will not comply with applicable zoning regulations related to setbacks and parking. Instead, the Project is seeking substantial variances from those regulations. The City’s position—as explained during the Land Use, Sustainability, and Resilience Committee meeting—is apparently that a project that requires a variance from zoning standards is not “inconsistent” with the City’s zoning regulations, because the City’s Code allows for variances. That position, however, is clearly inconsistent with the law. (*See Wollmer v. City of Berkeley* (2011) 193 Cal.App.4th 1329.)

*Wollmer v. City of Berkeley* involved an affordable housing project on a 0.79 acre site in the City of Berkeley. (*Id.* at 1335-36.) Because it was an affordable housing project, the project was statutorily entitled to a density bonus, along with a waiver or reduction of development standards that would prevent construction of the development. (*Id.* at 1346.) In finding that the city’s application of certain reduced development standards did not preclude application of the Class 32 exemption, the Court of Appeal explained:

On its face the exemption only requires consistency with applicable general plan designations and policies and applicable zoning designations and regulations. (Guidelines, § 15332, subd. (a).) The

Riverside City Council  
August 16, 2021  
Page 3

density bonus statute in turn ***requires a waiver of development standards*** that physically preclude construction of a density-bonus qualifying project. (§ 65915, subd. (e)(1).) And the City’s own zoning ordinance generally requires the grant of a density bonus upon a complete application. (Berkeley Mun. Code, § 23C.12.050.A.) ***Taking these laws together as they operate in the context of a density bonus project, it is clear that the waived zoning standards are not “applicable”*** and that the requirements of Guidelines section 15332, subdivision (a) were met.

(*Id.* at 1348-1349 [agreeing with the city’s argument that “development standards which it waived pursuant to [the Density Bonus Law] were not ‘applicable’ to the project within the meaning of Guidelines section 15332, subdivision (a) because [the Density Bonus Law] renders these standards inapplicable in order to allow the density bonus”].) Thus, in holding that development standards a city is required to waive are not “applicable” to a project for purposes of the Class 32 exemption, the *Wollmer* court made clear the result would be different if such waiver was not required, *i.e.*, a project that requires a discretionary variance cannot qualify for the exemption.

Moreover, any other interpretation would make the requirement that a project be consistent with “applicable zoning designations and regulations” utterly meaningless. A city obviously cannot approve a project that is inconsistent with its zoning standards without a variance. The City’s requirement would thus reduce the requirement that a project be “consistent with . . . applicable zoning . . . regulations” to a nonsensical condition that a City merely have the authority to approve the project under its zoning code. Likewise, if the City’s interpretation were correct, then the City could apply the Class 32 exemption to a project that requires a zone change, since the City’s zoning code allows such changes. This is clearly not what is intended by the Class 32 exemption. Accordingly, as a matter of law, the City cannot rely on the Class 32 exemption to approve a project that requires a zone change, and the City cannot approve the Project without complying with CEQA.

B. The Project does not qualify for the Class 32 exemption, because of its impacts.

Moreover, even if the Project did not require multiple variances, it would not qualify for the Class 32 exemption for several other reasons. As explained in the attached letter from Nicole Criste, Terra Nova Planning and Research, Inc. (attached hereto as Exhibit A), the traffic and noise analyses prepared for the Project are insufficient to demonstrate that the Project will not have impacts related to construction traffic and/or noise/vibration. The City thus has not established the Project will not have impacts related to traffic and noise, as required in order to rely on the Class 32 exemption.

Furthermore, CEQA expressly provides that categorical exemptions may not be applied to “[a] project that may cause a substantial adverse change in the significance of a historical

Riverside City Council  
August 16, 2021  
Page 4

resource.” (Pub. Res. Code § 21084(e).) The City has relied upon a Historic Resource Evaluation Assessment Report prepared by George Taylor Loudon (“Louden Report”) to argue that the Project will not significantly impact any historical resources. As set forth in detail in the attached memorandum from Jenna Snow (“Snow Report”),<sup>2</sup> however, the Loudon Report is deficient in numerous respects. As explained by Ms. Snow, the Project fails to even attempt to preserve significant historical features of the interior of the Central Fire Station, which is listed in the California Register of Historical Resources. (Snow Report, p. 7.) Further, the Project will adversely impact other historical resources surrounding the Project site. (Snow Report, pp. 8-10.) Even if the City disagrees with Ms. Snow’s analysis, her expert opinion nonetheless constitutes substantial evidence of an significant impact to historical resources that precludes reliance on a categorical exemption and requires an environmental impact report be prepared. (See Pub. Res. Code § 21084.1; *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1072 [“once the resource has been determined to be an historical resource, then the fair argument standard applies to the question whether the proposed project ‘may cause a substantial adverse change in the significance of an historical resource’ (§ 21084.1) and thereby have a significant effect on the environment”].) For this reason, as well, the City cannot rely on a categorical exemption to approve the Project.

Reliance on the Infill Exemption is similarly precluded by the “unusual circumstances” exemption, which prohibits use an exemption where a project may have significant impacts due to an unusual circumstance. (CEQA Guidelines § 15300.2(c).) The facts that: (1) the Site includes a historical resource; and (2) the Site is surrounded by other historical resources certainly constitute unusual circumstances and differentiate the Project from other infill development that may fall within the Class 32 exemption. Thus, any potential impact related to those circumstances disqualifies the Project from reliance on an exemption. (CEQA Guidelines § 15300.2(c).)

Further, as both Ms. Criste and Ms. Snow point out in their reports, the City’s consultants have proposed “mitigation” for significant environmental impacts related to noise and historical resources. The City cannot lawfully rely on an exemption when a project results in significant impacts requiring mitigation, as is the case here. (*Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1200; *Salmon Protection & Watershed Network v. County of Marin* (2004) 125 Cal.App.4th 1098, 1102.)

## **II. The Project Does Not Qualify for a Variance.**

Variances from the terms of the zoning ordinances shall be granted ***only*** when because of ***special circumstances*** applicable to the property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance ***deprives such property of privileges***

---

<sup>2</sup> Ms. Snow is a historic preservation consultant who meets the Secretary of the Interior’s Professional Qualification Standards. Her letter report, including her experience and qualifications, is attached hereto as Exhibit B.

Riverside City Council  
August 16, 2021  
Page 5

*enjoyed by other property in the vicinity* and under identical zoning classification.” (Gov. Code § 65906, *emph. added.*)<sup>3</sup> Moreover, such findings must be supported by substantial evidence and must “bridge the analytic gap between the raw evidence and ultimate decision or order.” (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal. 3d 506, 515 [overturning grant of variance where city failed to make adequate findings supporting its issuance].) Such circumstances are not present here, and thus, granting the requested variances would not be proper.

The Site’s size, shape, topography, location, and surroundings do not vary substantially from those of other parcels in the same zoning district or vicinity such that special circumstances exist. As noted by Ms. Criste in her report:

[T]he proposed project site is rectangular in size, and is consistent in size and shape with all surrounding parcels in the area, as shown on page 1 of the Planning Commission staff report of April 15 (staff report). The site is flat, and neither its location or surroundings create a circumstance where the project could not comply with zoning standards. There is nothing “unique” about the site in the context of the downtown area, and the site is typical of the urban environment in this part of Riverside. (Criste Report, p. 2.)

The Findings state that the inability to acquire additional land and the Project’s location in historic districts are both special circumstances that prevent the Project from implementing the front setback requirement, because they might result in fewer hotel rooms.<sup>4</sup> As noted by Ms. Criste:

This is neither appropriate justification nor germane to a variance Finding. The property is entirely consistent in shape, size and context with its neighbors. It is an urban block that is regulated by the urban standards established in the [Downtown] Specific Plan. That Plan explicitly aims to create a vibrant environment that encourages pedestrian activity, and requires the 15 foot setback on Mission Inn Avenue to bring consistent urban fabric to this historic sub-district. The loss of a few hotel rooms is not a special circumstance, and is not adequate justification for the City to support the variance. (Criste Report, p. 3.)

---

<sup>3</sup> As set forth in Ms. Criste’s letter, the variance findings in the City’s Zoning Code, Section 19.720.040 are more lenient than those required by the State Planning & Zoning Law, Government Code Section 65906. To the extent the local provisions conflict with state law, they are preempted and invalid. (Longin’s California Land Use § 1.72 [“local governments may not adopt ordinances that conflict with the state Planning and Zoning Law (Gov.C 65000 *et seq.*)”].)

<sup>4</sup> References herein to the “Findings” are to the Findings adopted by the Planning Commission at its April 15, 2021 hearing on the Project.



Riverside City Council  
August 16, 2021  
Page 6

Courts have overturned an agency's granting of a variance in similar circumstances when there has been no showing that a property differs substantially from other parcels in the zoning district. (*Topanga*, *supra*, 11 Cal.3d at 522; *Orinda Assn. v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1166; *PMI Mortgage Ins. Co. v. City of Pacific Grove* (1981) 128 Cal.App.3d 724, 731.)

Because the Site is consistent with its neighbors, the City cannot find that without the variances, the Project applicant would be denied the privileges that are enjoyed by other property owners in the vicinity. As noted by the Court of Appeal in *Orinda Assn.*, *supra*, 186 Cal.App.3d at 1166, “***the desirability of the proposed development***, the attractiveness of its design, the benefits to the community, ***or the economic difficulties of developing the property in conformance with the zoning regulations, lack legal significance*** and are simply irrelevant to the controlling issue of whether strict application of zoning rules would prevent the would-be developer from utilizing his or her property to the same extent as other property owners in the same zoning district.” (emph. added.)<sup>5</sup>

The applicant entered into a contract with the City to purchase the property for a 161-room hotel in 2018. The applicant knew or should have known of the key limitations on development, including the front setbacks and parking requirements. Now, the applicant is proposing a 226-room hotel and claiming the increased size justifies substantial variances from the setback and parking requirements. (See Finding No. 1 [purporting to justify the variance on the grounds that increasing the front setback would result in “reduction of guest rooms” and “loss of building footprint” and adding additional parking would “result[] in a reduction in the amount of guest rooms . . .”].)<sup>6</sup> Financial or self-induced hardship, as is the case here, is not a sufficient basis on which to grant a variance. (See, e.g., Riverside Zoning Code [“RZC”] § 19.720.020(C); *Broadway, Laguna, Valley Association*, *supra*; *San Marino v. Roman Catholic Archbishop* (1960) 180 Cal.App.2d 657; *Minney v. Azusa* (1958) 164 Cal.App.2d 12; and *Town of Atherton v. Templeton* (1961) 198 Cal.App.2d 146.)

Contrary to state law, the proposed variances would grant the Project applicant special privileges that are inconsistent with the restrictions placed on other parcels in the same zoning district or vicinity. (Gov. Code § 65906 [“Any variance granted shall be subject to such conditions as will assure that the adjustment thereby authorized shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such property is situated.”].)

---

<sup>5</sup> (*Accord*, *Broadway, Laguna, Valley Association v. Board of Permit Appeals* (1967) 66 Cal.2d 767, 775; *Hamilton v. Board of Supervisors of Santa Barbara County* (1969) 269 Cal.App.2d 64, 67; and *Stolman v. City of Los Angeles* (2003) 114 Cal.App.4th 916, 926.)

<sup>6</sup> The Findings even purport to assail the integrity of the setback requirement itself, arguing in a nonsensical manner that a variance is needed because the 15 foot front yard setback “is contrary to the desired character and unique sense of identity” for the Raincross District. (Finding 2.)

Riverside City Council  
August 16, 2021  
Page 7

### **III. The Conditional Use Permit Findings Are Legally Inadequate.**

#### **A. The Findings Do Not Contain Any Evidence To Support Issuance of a Conditional Use Permit for the Hotel.**

The Findings purporting to grant the Conditional Use Permit merely repeat the findings contained in RZC Section 19.760.040 required for a use permit. There is no analysis whatsoever as to how granting a use permit for the hotel is consistent with these findings. The Findings are not supported by any evidence, let alone substantial evidence, as is required.<sup>7</sup> (Code of Civil Procedure § 1094.5(b) [court reviews land use decisions for abuse of discretion; “[a]buse of discretion is established if . . . the order or decision is not supported by the findings, or the findings are not supported by the evidence.”]; *Topanga, supra*, 11 Cal.3d at 522; and *Lucas Valley Homeowners Association v. County of Marin* (1991) 233 Cal.App.3d 130, 142.)

#### **B. A conditional use permit cannot lawfully be used to grant variances from height or floor area ratio requirements.**

In addition to needing variances for the front yard setback and parking deficiencies, the Project requires variances for height and floor area ratio (“FAR”). The City is purporting to approve such variances through a conditional use permit. It is well settled that a use permit is not a legal substitute for a variance. (Government Code § 65906 [noting that the statutory provisions pertaining to variances “shall not apply to conditional use permits.”]; *Tustin Heights Association v. Board of Supervisors of Orange County* (1959) 170 Cal.App.2d 619, 627 [court observes that “a conditional use and variance are not one and the same and the provisions for each of them are not to be construed together as reciprocal parts of an integrated ordinance . . .”]; *see also Neighbors in Support of Appropriate Land Use v. County of Tuolumne* (2007) 157 Cal.App.4th 997 [court overturns granting of ad hoc exceptions from zoning requirements as violating the uniformity requirement of Government Code § 65852] and RZC § 19.760.010 [“The City recognizes that certain *uses* . . . require special review to determine if the *use* proposed . . . is compatible with surrounding uses, or through the imposition of development and use conditions, can be made compatible with surrounding uses.”] [emph. added].)

#### **C. The Findings do not address the height or floor area ratio exceptions being sought.**

Even if a conditional use permit could somehow grant variances from development standards such as FAR and height, the Conditional Use Permit Findings here are entirely silent as to these topics. In order to approve the Project, the City must find that the proposed Project height and FAR are: “substantially compatible” with other existing and proposed uses; not materially

---

<sup>7</sup> The findings purporting to support the Certificate of Appropriateness are likewise not supported by substantial evidence in the record as explained in the expert reports attached hereto.



Riverside City Council  
August 16, 2021  
Page 8

detrimental to the public health, safety, or welfare; and in “furtherance of a compelling governmental interest and . . . the least restrictive means of furthering that compelling governmental interest.” (RZC § 19.760.040.) Per the Downtown Specific Plan (“DSP”), the City must also find that the proposed Project height and FAR “specifically supports the purpose and intent of the Raincross District and [are] compatible with surrounding development and design.” (DSP §§ 6.5.1(B)(2), 6.5.2(B).)

As noted above, the Project is not compatible with existing uses. The City must also explain how such major exceptions for height and FAR are in furtherance of a compelling governmental interest and the least restrictive means of furthering that interest. We do not believe it is possible to credibly make such findings for the Project. The City is also required to explain how the Project height and FAR support the purpose and intent of the Raincross District and are compatible with surrounding development and design. The City has failed to make the necessary findings for height and FAR, as required. (Code of Civil Procedure § 1094.5(b) [court reviews land use decisions for abuse of discretion; “[a]buse of discretion is established if . . . the order or decision is not supported by the findings, or the findings are not supported by the evidence.”].)

#### **IV. The Project is Inconsistent with the City’s General Plan.**

All local land use decisions, including consideration of this Project, must be shown to be “consistent with” the applicable general plan. (*Citizens for Parks & Recreation v. Superior Court* (2016) 2 Cal.5th 141, 152 [invalidating project approval where not shown to be consistent with general plan]; *Families Unafraid to Uphold Rural Etc. of Placer County v. Board of Supervisors of Placer County* (1998) 62 Cal.App.4th 1332, 1336 [county abused its discretion by approving a development project inconsistent with general plan policies].)

The City’s General Plan is effectively the “constitution for all future development” in the community, and any subordinate land use action that is not shown to be consistent with the general plan is “void ab initio.” (*Leshar Communications, Inc. v City of Walnut Creek* (1990) 52 Cal.3d 531, 540, 545.) “The propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements.” (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 570.)

In order to be deemed “consistent,” a proposed project must actually be “compatible with the objectives, policies, general land uses, and programs specified in the General Plan.” (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 378-79 [county abused its discretion in adopting a specific plan that permitted development without “definite affirmative commitments to mitigate” impacts to traffic and housing contrary to policies and objectives set forth in its general plan].) “Consistency requires more than incantation, and [an agency] cannot articulate a policy in its general plan and then approve a conflicting

Riverside City Council  
August 16, 2021  
Page 9

project.” (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 789.)

Failure to comply with even *one* general plan policy is enough to render a project “inconsistent” with the general plan, and any project approvals would be invalid. (*See, e.g., Spring Valley Lake Association v. City of Victorville* (2016) 248 Cal.App.4th 91 [invalidating city’s approval of permit for commercial development because of failure to show consistency with one general plan policy]; *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 640-642 [finding a project to be inconsistent with an agency’s general plan based on its failure to comply with a single policy requiring the agency to “coordinate” with specified resource agencies on mitigation for impacts to special-status species]; *accord, Endangered Habitats League, supra*, 131 Cal.App.4th at 789 [project’s failure to comply with a single general plan provision calling for use of a prescribed traffic study methodology].)

The Project is manifestly inconsistent with *several* of the City’s fundamental objectives and policies embodied in the General Plan, as shown in the chart attached hereto as Exhibit C.

**V. The Project Conflicts with Public Bidding Law and the Approved Purchase & Sale Agreement.**

In its July 18, 2017 Request for Qualifications (“RFQ”) for the Site, the City stated that it was soliciting applications from development firms interested in “the collective and concurrent: 1) adaptive reuse of the currently vacant Historic Fire Station No. 1, located at 3466 Mission Inn Avenue, which shall be limited to dining, entertainment, brewing establishments/brew pubs, night club, art gallery, or office uses and 2) development of an upscale hotel located at 3398 Mission Inn Avenue, which shall include, at a minimum, 5-stories, a restaurant, and rooftop bar and guest lounge (collectively the ‘Project’).”

Despite the RFQ’s requirement for “collective and concurrent” development, the Project applicant acknowledges in its July 29, 2021 Project Narrative that: “There is no timeline associated to any interior improvements . . . inside the fire station, and those will be handled on a separate permitting process.” (Project Narrative, p. 4.) The applicant’s statement in this regard is in direct contravention of the RFQ.

The applicant’s proposal to reuse the Historic Station at some unspecified point in the future also conflicts with the Purchase & Sale Agreement (“PSA”) it entered into with the City. In Section 1.3.2, the parties acknowledge that “the Properties must be developed concurrently and cannot be constructed, rehabilitated or developed independently.” That section goes on to say that if the Project applicant/Buyer should fail to develop the Properties concurrently, “the Sellers shall have the ability to terminate this Agreement and seek all available remedies under the law as well as those set out in Sections 6 and 7.”

Riverside City Council  
August 16, 2021  
Page 10

Moreover, Section 1.3 of the PSA expresses Buyer's intent to adaptively reuse the Historic Station as a hotel lobby for a 161-room hotel. The applicant is not intending to use the Historic Station as a hotel lobby, but instead is proposing to develop two hotels (containing 226 rooms) with two lobbies on the small site. Section 2.4 states that the Parties had agreed to the conceptual project depicted in Exhibit D to the PSA. The conceptual project bears no resemblance to the Project proposed for approval. The City Council cannot lawfully approve the Project as proposed without amending the PSA.<sup>8</sup>

Further, while the Project consists of a high end boutique hotel—AC by Marriott—it also includes the Residence Inn, which is described an “extended stay product with kitchenettes.” (Project Narrative, p. 1) The Project applicant acknowledges that the two products are quite different:

The AC and Residence Inn both meet different market demands in the Riverside downtown hospitality environment. The AC is expected to cater to the higher end business guest who travels with the Marriott Rewards program. This product is for the traveler that isn't spending much time in their room and needs a very simple and streamlined setup. The typical business guest staying at the AC will be here for Convention Center events, or public/private business with many of the government and private businesses in the area.

The Residence Inn caters to a different guest than the AC. These rooms are much larger inside and include kitchenettes for longer staying guest. These guest (sic) typically are staying 3 days and longer and will be spending more time in their rooms. While the downtown core has many great places to eat, some guest prefer to visit a grocery store and stock their rooms with food to prepare their own meals. The expectation is that these guests are here to stay close to a friend or relative undergoing treatment at Riverside Community Hospital or perhaps as a travelling professor for one of the local colleges or universities. Even private companies will locate temporary employees on a special assignment that last longer then (sic) a typical short stay. (Project Narrative, pp. 1-2.)

As such, the Project is not consistent with the RFQ in at least two additional ways. First, the Project contains two hotels, not one as advertised in the RFQ. The proposal that was awarded to the applicant was for one high-end Hilton hotel comprised of 161 rooms. (See May 8, 2018 Staff

---

<sup>8</sup> The City Manager was only authorized to make minor, non-substantive changes to the PSA. (Minutes, May 8, 2018, Agenda Item No. 17.) These changes are not minor nor non-substantive.

Riverside City Council  
August 16, 2021  
Page 11

Report to City Council, Agenda Item No. 17, p. 3.) Second, the Project contains one upscale hotel and one non-upscale hotel.

The RFQ also stated that the Project was expected to “exemplify exceptional architecture that compliments the surrounding buildings” and “must be consistent with . . . design standards and guidelines of the Mission Inn Historic [District] . . .” Moreover, the RFQ stated that the Project “must be consistent with the City’s parking requirements” and “must allow for ample parking to meet city codes...” The Project conflicts with both of these mandates by not conforming to the size, scale, and massing of surrounding buildings and by falling short of City parking requirements by 82 spaces.

It is neither fair nor equitable to those who submitted proposals in response to the RFQ to materially change the terms of the RFQ after it has been awarded to allow the successful bidder to develop a project substantially different than the one described in the RFQ.<sup>9</sup>

\*\*\*\*\*

In closing, Mission Inn has significant concerns with the Project. The Mission Inn thus joins its neighbors and many Riverside residents in urging the City Council to reject the Project, as currently configured, and send it back to the drawing board. Representatives of the Mission Inn will in attendance at your August 17, 2021 hearing on the Project. In the meantime, please do not hesitate to contact the undersigned with any questions regarding this correspondence.

Sincerely,

RUTAN & TUCKER, LLP



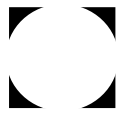
Peter J. Howell

cc: David Bristow  
Phaedra Norton, City Attorney  
David Welch, Community & Economic Development Director  
Al Zelinka, City Manager

---

<sup>9</sup> It is also not clear whether the City complied with the Surplus Land Act (Gov. Code § 54220 *et seq.*) by noticing the availability of the Site for affordable housing and/or open space purposes. This seems especially germane given that the City was willing to sell the Site to the applicant for less than half of its appraised value. (May 8, 2018 Staff Report to the City Council, pp. 3-4.)

# EXHIBIT A



August 16, 2021

Mr. Peter Howell  
Rutan & Tucker LLP  
18575 Jamboree Road, 9<sup>th</sup> Floor  
Irvine, CA 92612

RE: Land Use and CEQA Analysis – City of Riverside Hotel Project, City Case Nos. P-19-0560, P-19-0561 and P19-0562

Dear Mr. Howell:

At your request, we have reviewed the Planning Commission staff report (Hearing Date April 15, 2021), City Council staff report and supplemental materials supplied to the City Council for its August 17<sup>th</sup>, 2021 meeting, historic records and associated materials relating to the proposed development of a 226 room dual-brand hotel at 3420-3482 Mission Inn Avenue, in the City of Riverside. The project, in addition to the hotel component, also proposes a parking garage and 12,000 square feet of office space in a historic building which was previously the City's downtown fire station. The purpose of our review was two-fold:

1. To determine whether the City has appropriately applied State Government Code and local law related to land use; and
2. Whether the determination that the project is exempt from the California Environmental Quality Act (CEQA) is appropriate in this case.

As described below, we find that the City has inappropriately allowed variances for the project, and violated the requirements of CEQA.

#### Project Description

The applicant proposes the development of 226 hotel rooms in an eight-story U-shaped configuration, over a subterranean parking structure, and the conversion of the existing historic downtown fire station into 12,000 square feet of office space (for lease, no tenant identified) and 6,172 square feet of storage for the hotel and office uses. The project proposes a total of 173 parking spaces for all the uses, falling far short of the City's Zoning Ordinance requirement for a total of 255 spaces. It is important to note that the parking requirement in the staff report is understated. According to the Downtown Specific Plan, hotels require 1 parking space per room plus parking for ancillary uses, at a 50% reduction from the stated standard. In this case, the lounges, bars and roof decks, all of which are open to the public, require parking spaces. Neither the square footage for these areas, nor an analysis of the parking required for them, is included in the staff report. Therefore, the requested variance for parking is much more significant than the 82 space deficit disclosed in the staff report.

The project also proposes front setbacks for new structures at 1 foot, rather than the required 15 foot front yard setback. The parking and setback deficiencies are proposed to be approved through two variances.

The City has determined that although the project requires CEQA review, it qualifies for exemption under Guidelines Section 15332 because it is infill development, and 15331, because it claims that the existing fire station will be restored. The City prepared an analysis, with technical studies, in support of this determination.

The Variances are not Consistent with State law

Cities are granted the right to approve variances by California Government Code Section 65906. The allowance, however, is purposely narrow in scope, and is intended to be used only under very specific circumstances when specific conditions would render land otherwise unusable:

“Variances from the terms of the zoning ordinances shall be granted only when, because of special circumstances applicable to the property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.” (emphasis added)

Contrary to the statements made in both the Planning Commission and “Revised Applicant Variance Findings” provided to the City Council, the proposed project site is rectangular in size, and is consistent in size and shape with all surrounding parcels in the area, as shown on page 1 of the Planning Commission staff report of April 15 (staff report). The site is flat, and neither its location or surroundings create a circumstance where the project could not comply with zoning standards. There is nothing “unique” about the site in the context of the downtown area, and the site is typical of the urban environment in this part of Riverside.

As stated in the City’s Zoning ordinance, all four Findings must be supported in order to allow a variance. In this case, Findings 1 and 2 alone cannot be supported. In addition, the City’s Findings for variances are completely inconsistent with Government Code, and allow the arbitrary and capricious use of variances for any purpose. Specifically, Finding 1 states:

“The strict application of the provisions of the Zoning Code would result in practical difficulties or unnecessary hardships inconsistent with the general purpose and intent of the Zoning Code.”

Nowhere in State law are “practical difficulties” considered a justification for a variance. Nowhere in State law is the reduction of a front yard setback or the reduction of a parking standard considered an “unnecessary hardship.” The Finding, in and of itself, is not an appropriate use of land use controls, and is simply an easy excuse to throw out the rules if they are inconvenient.

In this case, the justification provided by the City in both the Planning Commission staff report and the “Revised Applicant Variance Findings” provided to the City Council is completely arbitrary and capricious. It describes as sufficient that the project has complied with “most” development standards. It further justifies the setback variance by finding that it would reduce guest rooms and parking, neither of which are relevant to the provisions of law. Further, given that the parking is subterranean and would not be impacted by a 15 foot setback, since the parking structure could still be built under it, the argument is baseless. When analysing the parking reduction, the City’s Planning Commission analysis states:

"Compliance with the parking requirements would apply parking standards to an urban infill project that are not suitable to the context. Strict compliance with parking requirements would necessitate adding additional parking spaces, resulting in a reduction in the amount of guest rooms or the acquisition of additional property, each of which would constitute a practical difficulty due to the uniquely constrained nature of the site."

On its face this analysis is flawed. First, the text fails to describe that the parking requirements in the Raincross District of the Downtown Specific Plan were developed based on a parking study which specifically analyzed the urban environment being created in the Downtown Specific Plan (see further analysis below). Second, the parking for this project is being provided entirely underground, below the proposed structure. No additional land is needed, and no loss of hotel rooms would occur if the project simply added a subterranean parking level. The developer may not want the expense, but that is not grounds for a variance of a standard that has already been reduced to accommodate exactly the urban setting which the City argues justifies it. This is particularly true since the City's own Chapter 19.720.020.C states: "Financial hardship does not represent grounds on which to file a variance application."

In the "Revised Applicant Variance Findings" provided for the City Council, the language relating to setbacks has been modified, but the intent remains. The Findings continue to insist that the site is "unique" and that unnecessary hardships would result from requiring the parking prescribed in the Specific Plan.

Nowhere in the analysis of Finding 1 does the City address the vision, policies or standards of the Specific Plan or the Raincross District. The Finding is not only inconsistent with State law, it is not supported by substantial evidence, and the project cannot rely on it to allow either variance.

Finding 2 is the only one in the City's Zoning code which comes close to conforming with State law, but still falls short:

"There are special circumstances or conditions applicable to the property involved or to the intended use or development of the property that do not apply generally to other property in the vicinity and under the identical zoning classification."

Based on this Finding, the City argues that the inability to acquire additional land and the project's location in a historic district both are special circumstances that prevent the project from implementing the front setback requirement, again because it might result in fewer hotel rooms. This is neither appropriate justification nor germane to a variance Finding. The property is entirely consistent in shape, size and context with its neighbors. It is an urban block that is regulated by the urban standards established in the Specific Plan. That Plan explicitly aims to create a vibrant environment that encourages pedestrian activity, and requires the 15 foot setback on Mission Inn Avenue to bring consistent urban fabric to this historic sub-district. The loss of a few hotel rooms is not a special circumstance, and is not adequate justification for the City to support the variance.

Furthermore, both sets of Findings argue that the setback should be reduced because the existing historic fire station has no setback. That statement is false. The fire station, on its Mission Inn Avenue frontage, is set back from the public right of way approximately 16 feet. A second floor projection extends over that setback in the westerly 48± feet of the structure. As can be



clearly seen on the Site Plan provided by the applicant (sheet A1.01, Planning Commission packet Attachment 7) the fire station walls are located further south than the proposed hotel building, by a distance of about 15 feet. That drawing clearly shows the location of the fire station doors and the ground floor of the building, without the second floor projection. Where the hotel structure begins, it is clearly further north than the fire station's location. The City's attempt to justify a variance is blatantly manufactured.

Finally, in the "Revised Applicant Variance Findings," the applicant attempts to present a Specific Plan guideline as a standard to justify the setback. The Specific Plan Design Guidelines state: "New structures should reflect the traditional widths of historic structures in the area." (15.8.1(2), emphasis added). In the Findings, however, that suggestive statement becomes a mandate: "the Specific Plan provides that the facades of new structures (i.e., the hotel) maintain the setback of existing historic structures..." Given that the fire station is set back from Mission Inn Avenue further than the hotel building, and that the Guidelines are suggestions not requirements, that statement is patently false.

As it relates to the parking variance, the analysis in both the Planning Commission and "Revised Applicant Variance Findings," once again ignore the Specific Plan's parking requirements, and instead seeks to further reduce the standard on the basis that the majority of patrons will use transit or can park in public parking lots surrounding the site. Both sets of Findings reference only the Zoning code parking standards. Nowhere in the analysis, however, does the City explain that the Specific Plan has its own standards based on a parking study specific to the downtown; or how the standards calculated in the Specific Plan on the basis of reduced demand and use of transit were somehow miscalculated or improperly analyzed. The only part of the analysis that is appropriate is the discussion of the existing fire station, and how the parking garage cannot extend below that structure, because of its historic significance. That argument, however, does not justify a parking reduction, since as previously stated, another parking level can simply be added to the balance of the site to meet the parking requirement.

The "Revised Applicant Variance Findings" add that the variance is appropriate because other buildings have access to public parking. In no way is that "right" as characterized in the Findings, appropriate for this Finding. First, the hotel's guests and visitors will have the same "right" to use public parking, regardless of whether the hotel has valet parking that reduces "the need for guests to self-park." There is no substantial evidence that this statement is true. On the contrary, the requirement for valet parking is likely to cause some guests to look for self parking, in order to avoid paying a tip to a valet (and regardless of whether a parking fee is imposed). Second, as described in the Specific Plan, the reduction in parking standards that were calculated for this part of the City included consideration of existing and planned public parking.

#### The Variances are not Consistent with the Downtown Specific Plan

The site is zoned Downtown Specific Plan, Raincross District and Cultural Resources Overlay. In the Raincross District, which is a subdivision of the Downtown area, setback standards are explicitly established:

"For parcels that have frontage on Mission Inn Avenue between the 91 Freeway and Main Street, the minimum setback shall be 15 feet. The front yard setback should incorporate a combination of "soft" features, such as landscaping, water, etc. and

"hard" features, such as pavers, ironwork fencing, etc. No parking is permitted in the front yard setback. " (Downtown Specific Plan, Section 6.5.5(2))

The purpose of all of the standards for the Raincross District and the Mission Inn Historic District in which the project is also located is described in Section 6.1:

"The center of the District is occupied by the Mission Inn Historic District, which contains Riverside's most important historic buildings. In this sub-area the development standards have been carefully crafted to maintain a scale of development that is compatible with the well-established historic fabric of the district."

In Section 6.6, the importance of design standards is further described:

"the design standards and guidelines for the Raincross District are intended to create a vibrant, pedestrian friendly downtown by encouraging pedestrian orientation to the storefronts, human scaled spaces, and pedestrian amenities."

The project, however, proposes a 1 foot setback which pushes the building to the sidewalk for the entire length of the project on Mission Inn Avenue, totally disregarding the Specific Plan's vision, and eliminating any pedestrian amenities, "soft" features and places where a pedestrian can find relief. Although one would expect that the historically significant fire station building, which is a pre-existing non-conforming use from the perspective of setbacks, would be allowed to continue, the City, for no reason other than to be consistent with the fire station's location, throws out the vision of the Specific Plan and proposes a variance. There is no basis for the variance in State law, and the use of the variance in the context of the Specific Plan's vision is completely inappropriate.

As it relates to parking, the requested variance is similarly inconsistent with the Specific Plan. The Specific Plan describes how the parking standards were reduced from the City's regular Zoning standards to account for the urban environment being created in Downtown, based on a comprehensive parking analysis conducted for a large and representative portion of the Specific Plan area:

"Most City Parking Codes, including Riverside's current code, set out parking ratio requirements for individual stand-alone land uses. While this is appropriate for most areas of the City, it is not appropriate for downtown areas for the following reasons:

- There is much more interaction between land uses in downtown areas, as people walk from one building to another.
- There is usually more on-street parking in downtown areas. (For example, approximately 17% of the parking in downtown Riverside is on-street)
- More people ride transit to downtown because transit service (both routes and service frequency) tends to be focused on downtown.
- Parking costs are usually higher in downtown, so more people rideshare.
- The peak parking demand for different uses tends to occur at different times of the day, so some parking supply can be shared by multiple uses." (Downtown Specific Plan, Section 16.2.3.)

The Specific Plan goes on to provide parking standards that are based on all of the same principles that the Findings analysis for Finding 2 are based. Clearly, the City is attempting to “double dip” the parking reduction requirement by reducing the parking standard twice. Yet nowhere in the Findings is the Specific Plan’s reduction analysed or considered. Again, the basis for the City’s Findings is arbitrary and capricious, and not based on substantial evidence.

#### The Project Cannot be Exempted as an Infill Project

CEQA provides specific conditions under which an infill exemption can be granted.

“Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.”

In this case, the project cannot be exempted because it is not consistent with “applicable zoning designation and regulations” and will have significant traffic and noise impacts.

A variance, by definition, is an acknowledgment that a project does not conform with applicable zoning regulations. Indeed, section 19.910.230 of the City’s Zoning ordinance defines “variance” as follows:

“Variance, pursuant to Section 65906 of the Government Code, a land use action that allows for deviation from the terms of the Zoning Code under specified conditions and specifically, when, because of special circumstances applicable to a property, including size, shape, topography, location, or surroundings, the strict application of the Zoning Code would deprive that property of privileges enjoyed by other property in the vicinity and under identical zoning classification.” (emphasis added)

A deviation from the Zoning Code is not consistent with “applicable zoning...regulations.” On that basis alone, the exemption fails. The City’s analysis,<sup>1</sup> never uses the word variance, except in the list of project applications, and never once describes the variances in its review of consistency with the General Plan and Zoning standards. On the contrary, the analysis states that the project is entirely consistent with the Downtown Specific Plan, and the standards of the Raincross District. Absolutely no substantial evidence of consistency is provided, and given that the project fails to provide either a minimum front yard setback or sufficient parking to meet the standards of the Specific Plan or of the District, the opposite is true. The project is not consistent with the applicable zoning designation (Raincross District) and therefore cannot be exempted as infill.

---

<sup>1</sup> “Class 32 Infill Streamlining Checklist,” prepared by Sagecrest Planning & Environmental, March 2021.

The analysis goes on to consider traffic, noise, air quality and water quality. In its analysis of traffic impacts, the two sentences of analysis of construction traffic impacts state that there will be impacts associated with construction, but that this impact will be temporary and will therefore be less than significant. No evidence of how the impact will be less than significant is presented, nor does the traffic impact analysis appended to the analysis address construction traffic. CEQA does not allow an impact to be written off on the sole basis that it is temporary. One cannot ascertain the level of impact, since no evidence is provided, but the mere fact that an impact is declared causes the exemption to fail.

As it relates to noise impacts, the analysis states that the project will result in vibration impacts, and consistent with the noise impact analysis appended to the document, states that "non-impact pile driving equipment" will be required. This requirement, however, is not included in the conditions of approval for the project, and is an impact under CEQA requiring mitigation. In addition, the noise impact analysis of vibration impacts to historic structures includes several surrounding buildings, but never addresses the impacts to the City's fire station. Given that the analysis assumes a distance of at least 30 feet, the stated vibration levels are not representative of the vibration that will be experienced on the project site, at a significant historic structure. Therefore, on the basis that mitigation is required to reduce impacts by requiring non-impact pile driving equipment, and that vibration impacts to a significant historic structure have not even been considered, the exemption fails, and cannot be used in this case.

#### The Project Cannot be Exempted under Section 15331

First, this exemption specifically states that the exemption only applies to "project limited to maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of historical resources." The project in this case is much more than this, and includes construction of new facilities that will impact this historic structure. As stated above, the project will have potentially significant impacts on this structure due to vibration during construction.

Furthermore, the historic resource analysis prepared for the project is flawed. First, it defers any assessment of the impacts to the interior of this historic building to a future date. CEQA does not allow for such a deferral, and requires that all of the impacts be addressed as early in the review process as possible. In this case, the historical record for the property is clear. In 2008, the interior of the building was determined to retain "most of its original uses in their original spaces," including the iconic fire poles which were still in use at the time. Yet the proposed project will completely destroy the interior to convert it to offices and storage, and the historic analysis specifically states that no analysis of this conversion has been undertaken. Given that all of the interior features will be lost, the conversion of the building represents a significant impact to a historic resource, and cannot be exempted from review under the provisions of CEQA.

As thoroughly described in the technical memorandum prepared by Jenna Snow, and incorporated into this letter in its entirety by this reference, the analysis conducted by the applicant as it relates to the historic resources is significantly flawed. First, the historic fire station is not the only structure that may be adversely impacted by the project. As stated in the memorandum, the historic districts which the project occurs in may also be impacted. Second, the applicant's analysis fails to recognize the status of the fire station as a registered historic building at the State level, or the impacts of the mass and scale of the new hotel to the historic significance of both the structures and the districts which surround it. As stated in the technical memorandum at pages 9-10:

"The proposed project bears no relationship to the mass, scale and proportions of the buildings within its immediate vicinity. The six historic buildings in its immediate vicinity, as noted above, are generally two or three stories high. Three of the buildings in the immediate vicinity have a prominent tower element on the opposite corners of Mission Inn Ave. and Lemon St. (First Congregational Church, Universalist-Unitarian Church, and Riverside Municipal Auditorium). In contrast, the proposed project includes a much taller building that steps down at the corner while maintaining the parapet, in direct opposition to the pattern established by the surrounding buildings. The proposed project bears no relationship to the proportions and massing of the historic building."

The City's reliance on a technically and factually flawed analysis of a significant historic resource results in a complete failure to address the requirements of CEQA. The proposed project will have a significant direct and indirect impact on historic resources in the City of Riverside. The project must be required to prepare an EIR to adequately address the significant impacts to a State listed and Nationally eligible historic resource, consistent with the provisions of CEQA Guidelines Section 15064.5.

#### Conclusion

As clearly shown above, the City has clearly erred in both its consideration of the variances for this project, and its CEQA determination. There is no substantial evidence that either of the variances are appropriately applied for the project, and the City cannot exempt the project from CEQA, because the project is not consistent with Zoning, and a historic structure will be impacted. The project should be redesigned to meet the Downtown Specific Plan's standards, and adequate CEQA review conducted. Consideration of the application by the Planning Commission and City Council should be tabled until that redesign and CEQA analysis are complete.

Sincerely,



Nicole Sauviat Criste  
Principal

NICOLE SAUVIAT CRISTE  
Principal

---

Ms. Criste has been with Terra Nova since 1985. She has extensive experience in the preparation of CEQA documents, including the DSRT Surf Specific Plan and EIR, Museum Market Plaza Specific Plan EIR, the Dune Palms & Highway 111 Specific Plan EIR, and the North Apple Valley Industrial Specific Plan EIR. She also worked with multiple jurisdictions on "fast track" projects including the Hard Rock Hotel, Mondrian Hotel (now Dolce), Oceo residential project, Eagle Canyon project, Port Lawrence and Delgrano projects, among others; and is currently handling on-going case work for the City of La Quinta.

She has conducted and managed the preparation of several community General Plans, including those for the cities of La Quinta (2002 and 2012), Apple Valley and Banning. She was the Project Manager for the Patterson Park Neighborhood Revitalization Strategic Plan for the City of Riverside, and the Coachella Valley Association of Governments' Green for Life Program, for which the Terra Nova team prepared a Green Building Program and Municipal Benchmarking and Energy Management Program.

Among her public sector clients, Ms. Criste has provided land use and environmental planning services to a number of cities, including Palm Springs, La Quinta, Palm Desert, Cathedral City, Twentynine Palms, San Bernardino, Indio, and Rancho Mirage.

In addition to extensive land use and community planning experience, Ms. Criste also provides expert services in environmental, land use and development design analysis, fiscal and economic impact analysis, market research and marketing strategy development. She has conducted numerous market and economic impact studies, as well as environmental studies for economic development and redevelopment agencies in the region.

Ms. Criste has also taught CEQA classes for City staffs, and prior to the demise of redevelopment agencies, for the California Redevelopment Association's certification program for redevelopment professionals. Ms. Criste also works with a number of attorneys as a CEQA expert, providing technical analysis in support of court actions in southern California, Santa Clara County and Sacramento.

Ms. Criste is a graduate of Scripps College with a Bachelor of Arts degree in European Studies.

# EXHIBIT B

## Memorandum

DATE: August 16, 2021

TO: Peter J. Howell  
Rutan & Tucker, LLP  
18575 Jamboree Road, 9th Floor  
Irvine, CA 92612

FROM: Jenna Snow

RE: 3420-3482 Mission Inn Avenue, Riverside, CA

A development project is proposed for the site located at 3420-3482 Mission Inn Avenue (Assessor Parcel Numbers 213281006, 213281007, and 213281009, hereinafter “project site”). The project site consists of a surface parking lot (APNs 213281006 and 213281007) and a two-story building, the Central Fire Station (also known as Fire Station No. 1), located at 3420 Mission Inn Avenue (APN 213281009). Constructed in 1957, the Central Fire Station is individually listed in the California Register of Historical Resources (California Register) and has been identified as appearing eligible for listing in the National Register of Historic Places (National Register) as part of a survey in 2012. The project site is also located within two, overlapping, locally designated historic districts: the Mission Inn Historic District and the Seventh Street Historic District. Individually designated historic buildings surround the project site on three sides. The proposed development project consists of a 226 room 8-story hotel, 93-feet, 4-inches in height over three levels of subterranean parking on two parcels, as well as alterations of the former Central Fire Station.

The proposed development was found to be exempt from the California Environmental Quality Act (CEQA) review pursuant to Section 15331, which relates to Historical Resource Restoration/Rehabilitation, and Section 15332, which relates to In-Fill Development Projects. To support that finding, a Historic Resource Evaluation Assessment Report was prepared by George Taylor Loudon, AIA, Inc., dated January 13, 2021 (GTL Report) with a supplemental Historic Resource Evaluation dated July 15, 2021 (Supplemental GTL Evaluation). Both the GTL Report and Supplemental GTL Evaluation concluded that the proposed project conforms with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties (Secretary’s Standards)* and therefore does not have an impact under CEQA.

The following memorandum first provides a brief description of the Central Fire Station, followed by a description of the Mission Inn Historic District and Seventh Street Historic District as well as other historical resources located in the immediate vicinity. The memorandum then addresses and refutes the historical resource findings of the GTL Report.



### Central Fire Station

The Central Fire Station was listed in the California Register in 2008, based on a Department of Parks and Recreation form (DPR 523 series) prepared earlier that year by Tanya Rathbun Sorrell for Modern Riverside.com.<sup>1</sup> The 2008 DPR form that serves as the California Register nomination is included as Attachment A. The California Register nomination describes the Central Fire Station as follows:



**Figure 1:** Central Fire Station, 3420 Mission Inn Ave., north elevation, view south (Snow, 2021)

Central Fire Station is a highly intact and well-articulated International-style fire station...Central Fire Station is a one-and-two story flat-roofed structure constructed in 1957. It is irregular in plan, composed of four intersecting volumes which are each loosely organized around a function: the apparatus room, hose tower, dormitory/administrative wing, and the station office. The one-story apparatus room makes up the eastern half of the building, the station office makes up the first and second floors of the western half, and the hose tower and dormitory/administrative wing are attached to the rear of the apparatus room and station office. The second story of the station office is defined by a solid-looking rectangular volume set on top of the first floor. The second story hangs over the front of the first floor, supported by three thin steel *pilotis* spaced evenly apart along the front of the overhang. The apparatus room, dormitory/administrative wing and first story of the station office are faced in low-profile red bricks, while the second story of the station office is sheathed in smooth-textured plaster. The hose tower is unpainted poured concrete.

The 2008 DPR form identifies the Central Fire Station as significant under criterion 3 “as an excellent example of the International style applied to an institutional building in Riverside. It is one of the few (if not only) International-style buildings in downtown Riverside.” Exterior character-defining features enumerated in the 2008 DPR form are:

- The deconstruction of the building’s functions into intersecting geometric forms
- Emphasis on volume and asymmetry
- Flat roof
- Horizontal bands of windows with minimal exterior reveals and that turn the corner of the building
- Use of brick and smooth plaster to define space

---

<sup>1</sup> California Department of Parks and Recreation 523 forms are used both in surveys and to nominate properties to the California Register.

- Overhanging supported by *pilotis* to define the entryway
- Absence of ornament
- Louvered rectangular screens on west and rear elevations

Interior character-defining features identified in the 2008 DPR form are:

- original uses in their original spaces
- spatial arrangement and floor plan
- the fireman's poles that lead from the second story to the apparatus room
- characteristic features of the maintenance room (such as the undercarriage access pit and an I-beam used to remove engines)

The GTL Report does not reference the California Register nomination. Rather, it critiques a 2012 survey form prepared by Historic Resources Group, which assessed the Central Fire Station for eligibility for listing in the National Register as part of a larger survey effort. The later, 2012 DPR form is based, in large part, on the California Register nomination and updates the earlier one to include National Register eligibility. It is important to note that the 2012 DPR form was completed as part of a survey effort while the California Register nomination was reviewed and accepted by the State Historic Resources Commission. In fact, the GTL Report, in most places, seems quite unaware of the California Register listing as it refers to the Central Fire Station as a “potential historical resource” on page 39. As described more fully below, listed in the California Register, there is no doubt that the Central Fire Station is indeed a historical resource for purposes of CEQA. As a result of this omission of referencing the document that resulted in California Register listing, the GTL Report identifies different, exterior character-defining features than the California Register nomination and fails to recognize the three-dimensional emphasis on volume and intersecting geometric forms of the Central Fire Station as well as all interior character-defining features. Review of the design of the new building, therefore, focuses simply on the façade and its two-dimensional qualities.

As the GTL Report seems to be quite unaware of the California Register nomination, it states that “there are limited character-defining features present within the interior spaces [of the Central Fire Station], stemming from multiple alterations of the non-public spaces” (page 12) and goes on to describe that “interiors throughout this building...have been remodeled and subdivided numerous times. A consequence is that there are few apparent surviving elements” (page 40). This statement is not supported by alteration permits or photographic documentation. It also contradicts the California Register nomination for the Central Fire Station that does not limit character-defining features to the exterior. If there have been substantial changes to the interior since 2008, those changes should be substantiated by documentary and physical evidence, which is not provided in the GTL Report. In the absence of such evidence, it is assumed that any character-defining features identified in the California Register nomination continue to be extant and must therefore be preserved in a project that conforms with the *Secretary's Standards*.

Furthermore, the GTL Report does not consistently describe the architectural style of the Central Fire Station. The report variously describes the style as “early modern” (page 17 and 20), “proto-Modern” (page 23), “proto-early-modern” (page 26 and 27), and “proto-modern, ‘International Style,’” (page 44). “Modern” architecture is typically used as an umbrella term to reference a variety of architectural styles employed throughout the twentieth century, one of which is “International Style.” The California Register nomination for the Central Fire Station defines the architectural style as “International Style” and clearly illustrates how the building embodies the style. Inconsistent and

ambiguous descriptors throughout the GTL Report misrepresents the building and its architectural significance.

### Mission Inn Historic District



**Figure 2:** View west along Mission Inn Ave from the northwest corner of Mission Inn Ave. and Lime St. (Snow, 2021)

The Mission Inn Historic District was locally designated in 1986 and described in the *City of Riverside Downtown Specific Plan* as a:

commercial district...bounded roughly by 6<sup>th</sup> Street between Main Street and the Riverside Freeway (Route 91) on the north to 11th Street between Orange and Main Streets on the south. The period of significance is 1871 to 1946. The district encompasses part of the Seventh Street Historic District and is distinctive for its embodiment of the Mission Revival style, a regional architectural movement that drew from the precedent of the Franciscan Missions.<sup>2</sup>

The Mission Inn Historic District is a large area that encompasses the core of downtown Riverside and “contains Riverside’s most important historic buildings.”<sup>3</sup>

### Seventh Street Historic District

The Seventh Street Historic District was locally designated in 1980 and was the City of Riverside’s first historic district. The mile-long historic district spans Seventh St. (now Mission Inn Ave.) from the Santa Fe railroad tracks to the Buena Vista Bridge and is “one of the city’s most cohesive districts of historically and architecturally significant buildings.”<sup>4</sup> Indeed, the Seventh Street Historic District has been called Riverside’s “big front porch” of the Mission Inn.<sup>5</sup> The Seventh Street Historic District and the Mission Inn Historic District overlap, with the project site located within that portion that intersects.

### Historical Resources in the Immediately Surrounding of the Project Site

In addition to the Mission Inn, which is located a city block to the west of the project site, other contributing buildings within the Mission Inn Historic District, immediately surrounding the project site, include:

1. Young Men’s Christian Association Building (YMCA), 1909, 3485 University Ave., City Landmark
2. First Congregational Church, 1912-1914, 3504 Mission Inn Ave., individually listed in the National Register, as well as a City Landmark
3. Universalist-Unitarian Church, 1891, 3525 Mission Inn Ave., City Landmark
4. Riverside Municipal Auditorium, 1927-1929, 3485 Mission Inn Ave., listed in the National Register, as well as a City Landmark

---

<sup>2</sup> City of Riverside, *Downtown Specific Plan*, adopted November 2002, last amended 2017, 2-7.

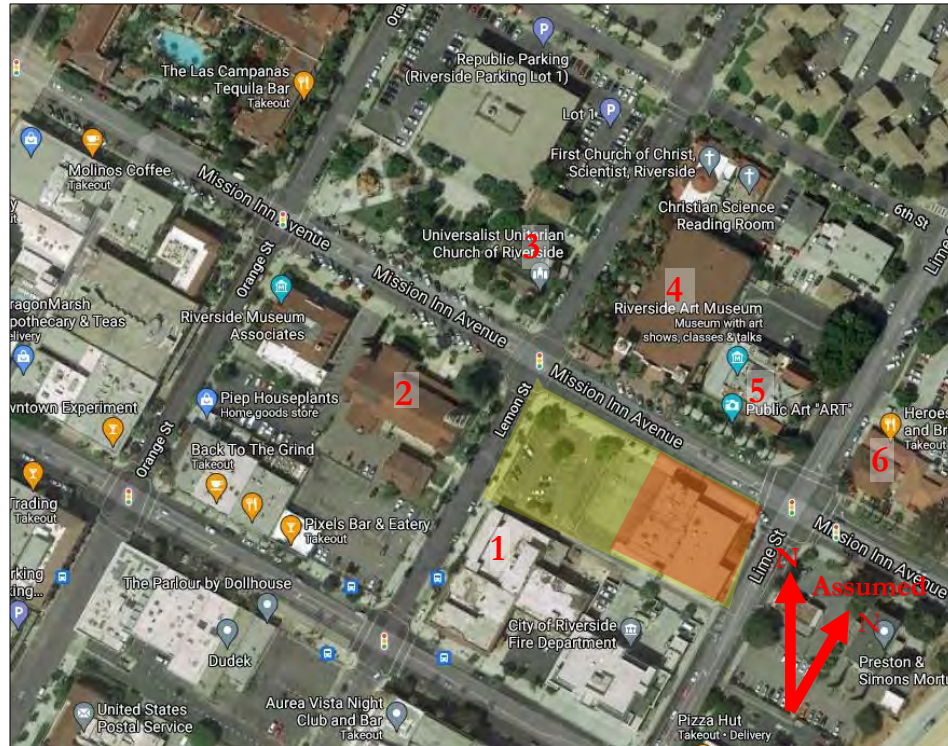
<sup>3</sup> City of Riverside, *Downtown Specific Plan*, adopted November 2002, last amended 2017, 6-10.

<sup>4</sup> City of Riverside, Interoffice Memo to the Cultural Heritage Board from Alan Curl, “Downtown Seventh Street, Riverside City Landmark #40, Statement of Significance,” December 3, 1992.

<sup>5</sup> Michael L. Rounds, *Whatever Happened to Seventh Street: Frank Miller and the Remaking of Riverside*, (Riverside, CA: Mission Inn Museum Press, 1997).

5. Old YWCA Building/Riverside Art Museum, 1929, 3425 Mission Inn Ave., listed in the National Register, as well as a City Landmark
6. Riverside Arlington Heights Fruit Exchange, 1923, 3391 Mission Inn Ave., listed in the National Register, as well as a City Landmark

The following map identifies the above buildings in relation to the project site. The project site is highlighted yellow, while the Central Fire Station is highlighted orange. Numbers on the below map correspond to the numbers listed above. As shown in the below map, the project site is surrounded on three sides by individually designated historical resources.



### California Environmental Quality Act (CEQA)

The purpose of CEQA is to evaluate whether a proposed project may have an adverse effect on the environment and, if so, if that effect can be reduced or eliminated by pursuing an alternative course of action or through mitigation. The *Guidelines for California Environmental Quality Act* (CEQA Guidelines) are the regulations that govern the implementation of CEQA. The CEQA Guidelines are codified in the California Code of Regulations (CCR), Title 14, Chapter 3, § 15000 et seq. and are binding on state and local public agencies. The basic goal of CEQA is to develop and maintain a high-quality environment now and in the future.

CEQA defines a historical resource as:

a resource listed in, or determined eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources..., or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant (California Public Resources Code, PRC §21084.1).



Because the Central Fire Station is listed in the California Register, it is without question a historical resource under CEQA. Furthermore, as the Mission Inn Historic District and Seventh Street Historic District are locally designated historic districts, they have presumptive significance under CEQA and are also historical resources. Finally, the six buildings in the immediate vicinity that are listed in the National Register and/or are designated City Landmarks, are also historical resources.

According to the CEQA Guidelines, a project would result in a significant impact to historical resources if it would cause a substantial adverse change in the significance of an historical resource. A substantial adverse change is defined in CEQA Guidelines §15064.5(4)(b)(1), as “physical demolition, destruction, relocation, or alteration of the resource *or its immediate surroundings* such that the significance of an historical resource would be materially impaired” (emphasis added). The significance of an historical resource is materially impaired, according to CEQA Guidelines §15064.5(4)(b)(2), when a project:

- (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
- (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to §5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of §5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of the evidence that the resource is not historically or culturally significant; or
- (C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.<sup>6</sup>

Under CEQA, the key issue relates to how a proposed development may impact the eligibility of a structure(s) or a site for designation as an historic resource.

The CEQA Guidelines also specify a means of evaluating the relative significance of project impacts on historical resources. CEQA Guidelines §15064.5(b)(3) states:

Generally, a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (Weeks and Grimmer, 1995), shall be considered as mitigated to a level of less than a significant impact on the historical resource.<sup>7</sup>

The *Secretary's Standards* were developed by the U.S. Department of the Interior as a means to evaluate and approve work for federal grants for historic buildings and then for the federal rehabilitation tax credit (see 36 Code of Federal Regulations Section 67.7). Similarly, CEQA recognizes the value of the *Secretary's Standards* by using them to demonstrate that a project may be approved without an environmental impact report (EIR). In effect, CEQA has a “safe harbor” by providing either a categorical exemption or a negative declaration for a project which meets the *Secretary's Standards* (see State CEQA Guidelines Section 15331 and 15064.5(b)(3)).

---

<sup>6</sup> CEQA Guidelines §15064.5(4)(b)(2).

<sup>7</sup> CEQA Guidelines §15064.5(b)(3).

In summary, the definition of substantial adverse change is whether a project demolishes or materially alters in an adverse manner the physical characteristics that convey historical significance of the resource or that justify its eligibility for the California Register or a local register. In other words, if a project would render an eligible historic resource ineligible then there would be a significant adverse effect under CEQA.

#### The GTL Report does not Adequately Consider Direct or Indirect Impacts of the Proposed Project

The GTL Report includes a myriad of regulations, not all of which are applicable to this project and confuse the purpose of the report. For example, the GTL Report includes an excerpt from the California State Historic Building Code, which does not have any relevance to assessing impacts of a proposed project under CEQA. Rather, the California State Historic Building Code provides alternative means and methods for meeting local building codes when rehabilitating a historic building. The only question the GTL Report should answer is: does the proposed project have either a direct or indirect impact on historical resources that would render any of them ineligible for designation. While the GTL Report minimally assesses the proposed new building for potential impacts to the Central Fire Station, it does not adequately consider direct and indirect impacts to the Central Fire Station or on the Mission Inn Historic District, the Seventh Street Historic District, or individually designated resources surrounding the project site on three sides.

#### *Direct Impacts to the Interior of the Central Fire Station*

As described above, CEQA Guidelines use the *Secretary's Standards* as a safe harbor to ensure that a proposed project would not render an eligible historic resource ineligible. The *Secretary's Standards* recognize both exterior and interior features. Rehabilitation Standards 2 states, "The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided." Without any evidence that interior features have changed since 2008, the GTL Report summarily dismisses all interior character-defining features that are part of its California Register listing and convey its significance as an International style fire station. Only by ignoring all interior character-defining features can the GTL Report conclude that any future modifications to the interior would conform with the *Secretary's Standards*, an assertion that is incorrect.

Although the proposed project identifies a new use for the Central Fire Station, converting it into office space and storage, modifications to the interior of the Central Fire Station are proposed for a future time and are not described in the GTL Report. As the GTL Report dismisses all interior character-defining features, it is able to state that any and all work on the interior of the Central Fire Station would not cause an impact. However, the 2008 California Register listing of the Central Fire Station does indeed include interior character-defining features. Because the GTL Report ignores the interior character-defining features and likely modifications, it cannot validly conclude that the project conforms with the *Secretary's Standards*. It is quite likely that future modifications will destroy interior character-defining features included with the California Register listing and would therefore not be in conformance with the *Secretary's Standards*.

#### *Direct Impacts Caused by Vibrations*

The proposed project includes construction of a three-story subterranean parking garage. Vibration impacts could constitute a significant direct impact to both the Central Fire Station and YMCA Building, located directly south of the project site and separated from it by only a narrow alley. While the CEQA checklist notes that "at distances ranging from 30 to 215 feet from Project construction activity, the typical project construction vibration levels will satisfy the historic building damage

thresholds,”<sup>8</sup> both the Central Fire Station and YMCA Building are closer than 30 feet from proposed construction activity. The GTL Report is remiss when it does not consider potential vibration impacts that could damage to either structure.

#### *Indirect Impacts to the Setting of Historical Resources*

The proposed project is located within two locally designated historic districts and is surrounded on three sides by individually listed historical resources. As the proposed project will be an addition to the Mission Inn Historic District, as well as the Seventh Street Historic District, it must conform with the *Secretary’s Standards*, specifically, Standards 9 and 10 that address additions. Standards 9 and 10 state:

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Guidance on conforming with the *Secretary’s Standards* 9 and 10 is published by the National Park Service in Preservation Brief 14: *New Exterior Additions to Historic Buildings: Preservation Concerns* (published in 2010).<sup>9</sup> This document updates and expands guidance provided in an earlier document that is referenced in the GTL Report (see page 100), an obvious omission of the GTL Report. Both Preservation Brief 14 and the design standards included as part of the Downtown Specific Plan are intended to provide general direction, acknowledging that every situation is unique. As described in Preservation Brief 14: “The appropriate size for a new addition varies from building to building.”

The most important considerations noted in Standard 9, as well as highlighted in both the Downtown Specific Plan as well as described in Preservation Brief 14, is compatibility of mass, size, scale, and proportion of the proposed addition, or in this case, new infill development in a historic district. As noted in Preservation Brief 14, “An addition that bears no relationship to the proportions and massing of the historic building – in other words, one that overpowers the historic form and changes the scale – will usually compromise the historic character as well.”<sup>10</sup> Additionally, the Downtown Specific Plan states that “new structures should maintain the average scale of historic structures within the area.”<sup>11</sup>

The GTL Report compares the greater than 93-foot height of the proposed new building to two historic buildings within the Mission Inn Historic District: the Mission Inn and the Walling Building (Former First National Bank of Riverside). The GTL Report describes the Walling Building as a “tall

---

<sup>8</sup> Sagecrest Planning + Environmental, *California Environmental Quality Act (CEQA) – Infill Streamlining Checklist*, prepared for Greens Group, Inc., March 2021.

<sup>9</sup> Anne E. Grimmer and Kay D. Weeks, *Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns*, (Washington, D.C.: U.S. Department of the Interior, National Park Service, Technical Preservation Services, August 2010), <https://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm#dense-architecture>.

The Downtown Specific Plan provides design guidelines specific to downtown Riverside for achieving conformance with the *Secretary’s Standards*.

<sup>10</sup> Anne E. Grimmer and Kay D. Weeks, *Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns*, (Washington, D.C.: U.S. Department of the Interior, National Park Service, Technical Preservation Services, August 2010), <https://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm#dense-architecture>.

<sup>11</sup> City of Riverside, *Downtown Specific Plan*, adopted November 2002, last amended 2017, 15-28.

five story structure” (page 10). Based on visual inspection, the Walling Building appears to be four-stories high, an inaccuracy in the GTL Report. In addition, the GTL Report does not consider that the Mission Inn, which gave the historic district its name, is the cornerstone of the historic district. Set back from the street, the Mission Inn has variable heights and its mass is broken up over the entirety of its large site. Along Mission Inn Ave., the building rises only to four stories. The treatment of achieving a taller height in some portions of the building, as well as the scale of the development, is radically different from the monolithic height of the U-shaped, 93-foot, 4-inch tower of the proposed project.

In contrast to the assertion in the GTL Report, the proposed 93-foot, 4-inch building does not “maintain the average scale of historic structures within the area” as required by the Downtown Specific Plan. An average is an arithmetic mean found by adding a group of numbers, in this case, the heights of structures within the immediate surroundings, divided by how many numbers are being averaged, or the number of historic structures. Based on a casual visual review, the average is nowhere near the proposed 8-story building, but is rather closer to the two and three-story height exhibited in the six surrounding historical resources.

Furthermore, the GTL Report, with more emphatic discussion in the Supplemental GTL Evaluation, compares the height of the proposed development to two contemporary developments: new construction at Stalder Plaza, which will be 74-feet high and the Imperial Hardware Lofts project, which is 68-feet high.<sup>12</sup> The Supplemental GTL Evaluation states in several places that these two projects are “identical with the proposed Project” (see for example page 6). The Mission Inn Historic District is quite large and the immediate surrounding of one location is quite different from another. The project site is in a unique location, surrounded on three sides by individually listed historic buildings. The setting is not at all comparable with either Stalder Plaza or Imperial Hardware Lofts, neither of which are additions to historical resources, surrounded by individually listed historical resources. Both of these other projects are in different locations with vastly different conditions and cannot be said to be at all “identical” to the proposed project.” The assertion that they are “identical” is false and misleading.

While the Raincross District allows for a height of 60-feet, the proposed project is greater than 93-feet tall, more than 50% taller than what is allowed. The GTL Report states, the proposed project height “is recommended to be considered *harmonious* with the scale and volumetric character of these significant structures” (page 18, emphasis added). This statement of compatibility is not supported by any facts or evidence in the GTL Report. In reality, the height of the proposed project is not at all harmonious within its setting in the historic districts.

The proposed project bears no relationship to the mass, scale and proportions of the buildings within its immediate vicinity. The six historic buildings in its immediate vicinity, as noted above, are generally two or three stories high. Three of the buildings in the immediate vicinity have a prominent tower element on the opposite corners of Mission Inn Ave. and Lemon St. (First Congregational Church, Universalist-Unitarian Church, and Riverside Municipal Auditorium). In contrast, the proposed project includes a much taller building that steps down at the corner while maintaining the parapet, in direct opposition to the pattern established by the surrounding buildings. The proposed

---

<sup>12</sup> It should be noted that George Taylor Loudon, AIA prepared Historic Resource Assessments for both Stadler Plaza and Imperial Hardware Lofts. Both projects include retention of only a portion of the facades. While the projects were approved by the City of Riverside, generally retention of only a portion of a façade, which is sometimes called a “facadism” or “facadomy,” is not in conformance with the *Secretary’s Standards* and is not considered best preservation practice. Preservation economist Donovan Rypkema has written that retention of just a façade should be called “Halloween preservation...keeping the mask and throwing away the building.” (Donovan D. Rypkema, *Planning for the Future, Using the Past: The Role of Historic Preservation in Building Tomorrow’s Washington, D.C.*, September 2003), 17).



project bears no relationship to the proportions and massing of the historic building. There is no discussion in the GTL Report about indirect impacts to the setting of either historic district or any of the surrounding historic buildings. The setting of both historic districts, including the visual relationships between historic buildings surrounding the project site, are character-defining features that will be adversely impacted by a much taller and more massive building.

The GTL Report reviews in depth the proposed project for compatibility with the Downtown Specific Plan, specifically potential impacts to the Central Fire Station. However, review of the proposed project as “Infill Construction in Commercial Historic District” (Section 15.8 of the Downtown Specific Plan) is limited to a discussion of various heights of other buildings. The GTL Report gives only a cursory review of proposed project impacts on either historic district or surrounding historic buildings. It simply states, “the integrity of the property and its overall environment has been preserved” (page 55). Unfortunately, there is no discussion as to how the integrity of setting of the overall environment has been preserved to back the assertion.

The Supplemental GTL Evaluation identifies four of the six surrounding individually designated buildings, omitting the YMCA Building immediately adjacent to the south and Riverside Arlington Heights Fruit Exchange. The Supplemental GTL Evaluation states, “materials, scale, height, massing and compositional strategies have been inspired by the listed Signature buildings...during the development of the Project design” (page 30). Again, there is no evidence presented to support how the proposed project was inspired by the surrounding historical resources and the proposed project does not exhibit any clear inspiration from surrounding historical resources.

Pre-submittal meetings with members of the Cultural Heritage Board and City of Riverside Community Development Department Planning Division specifically requested that “design review of the proposed work should be coordinated with, and compatible in design character with the immediate Historic Context...Perspective renderings should include immediate site context structures” (GTL Report page 37). A need for an evaluation of historic context is reiterated on page 47 of the GTL Report. Perspective renderings include only the First Congregational Church. The GTL Report lacks any analysis of how the proposed project’s design is compatible with surrounding historic buildings. Such an analysis is essential to determine if there are potential impacts to the setting of either historic district or any of the six surrounding individually listed historical resources.

#### Conclusions of the GTL Report are not clear

Finally, conclusions of the GTL Report are not clear. On page 38, the GTL Report states, “the thin diameter piloti columns of the Fire Station No.1 appear to be widened; these are character-defining features where such alteration of dimension may prove problematic.” This statement suggests that there are concerns with the exterior rehabilitation of the Central Fire Station. In addition, while the GTL Report does not identify any historic resource impacts, it nevertheless recommends a “mitigation program” (see specifically page 41) and other recommendations to bring the proposed project into conformance with the *Secretary’s Standards*. Yet, mitigation measures are only included to mitigate significant impacts. As the GTL Report indicates that a mitigation program is needed, it would follow that the proposed project does not currently conform with the *Secretary’s Standards* and thus would constitute a significant impact to the Central Fire Station. As such, the City is precluded from relying on an exemption from CEQA for the proposed project.

#### Conclusion

The GTL Report does not sufficiently analyze potential direct or indirect impacts of the proposed project on historical resources. In addition to inconsistencies with the 2008 California Register nomination of the Central Fire Station, the GTL Report does not assess direct and indirect impacts

of the proposed project on the Central Fire Station, the two historic districts within which it is located, nor surrounding historic buildings. It does not adequately assess the proposed project for conformance with the *Secretary's Standards* and dismisses any potential impacts to character-defining features of the interior. As modifications to the interior are proposed for a future time, there is no way to assess impacts for conformance with the *Secretary's Standards*. Furthermore, there are no conditions of approval that would require retention and rehabilitation of interior character-defining features. Even if there were such conditions, they would be mitigation measures precluding the project from relying on categorical exemption(s). If the project were to be approved as it is currently proposed, interior character-defining features may be destroyed without any environmental review or analysis, which could cause a substantial adverse change in the significance of the Central Fire Station.

While the GTL Report concludes that there are no project impacts, it nevertheless recommends a mitigation program, indicating that the proposed project does not conform with the *Secretary's Standards* and thus would result in a significant impact on historical resources. As the project may cause a substantial adverse change in the significance of historical resources, including the Central Fire Station as well as the Mission Inn Historic District, the Seventh Street Historic District, and surrounding individually listed historical resource, reliance on categorical exemption(s) is not appropriate and an EIR must be prepared.

Attachments:

- Attachment A: 2008 DPR form
- Attachment B: Curriculum Vitae

Attachment A: 2008 DPR form for the Central Fire Station

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

8+@#5%  
B/ >A 115318  
- +, &@#)  
: / B8 %'10%&S 3CS  
; " \$+0\*40  
/ SE\$F %&S / SE\$F \$+ 6 #'\$

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿ À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

1 %& 9 ' / \$0&+2\$%#(A\$&+A)\*+,-.#.\$/ )012\$%2/\$24 Central Fire Station  
8 GH ; ". \$+%C\$' \*\$H Fire Station No. 1

J8 KH D&2#'%& I 8 1L)\*2#'%& X M +\$0'4\*2'SC J#H&1, '5% Riverside  
#, C\*150)". / )5 3p2j5 /6)+7738)"9%8"7%):" ; ),. \$3\$, "2164  
JLHM N! QRPQ  
RI#C Riverside East 6 #"\$ 1967 PR 1980 T2S; R5W; S.B.B.M.

2H3 CG\$00 3420 Mission Inn Avenue ( \*'5 Riverside S>  
CHM- 9 \*<=)\$> %2\$78". )%.\$) &P'2#\$)". / (82)?.\$ "22\$, %23\$, 4 S&,\$ 8 92501  
SH; ". \$+0&2'\*\$& #) %'#1)\*\$6#B; "23\$7CB- 2\$37%., )742\$%A3\$B\$S="7%6B\$76B, )"; ;2%42-"74  
Southwest corner of Mission Inn Avenue and Lime Street, APN 213-281-005, Assessor Address: 3466 Mission Inn Av.

J8 TH 6S 02+U\*%& I%DS, 3240\$2\$%A3\$)". / )-7, > "E2\$S> \$.7, 6)F.3%A\$ )\$ , #.B> "72"2, B3% / -7%6B)"72"7%, B,-CB,\$7-. #B' / )0%A / "2-\$, 4  
Central Fire Station is a highly intact and well-articulated International-style fire station located on the southwest corner of Mission Inn Avenue and Lime Streets in downtown Riverside, California. It faces northeast on a corner lot, surrounded by parking lots to the west and south, Riverside Art Museum to the north, and commercial buildings to the east. The station occupies an urban setting with high visibility within the Mission Inn Historic District, a locally designated historic district that was determined eligible for the National Register in 1986. It has sustained a few minor alterations to the interior and exterior, but overall retains a high degree of integrity. (see continuation sheet)

J8 TLH /\$ 0&+2\$%3'"4=L1 "9D)\*9-, 7)"724A\$, )". / )3%\$, 4 HP-09 (Public Utility Building)  
J8 VH /\$ 0&1-2\$0%+S0\$, "I X HA-7-.- # I 7A37A2S J 0I537 I-7S D-, 7237 K2> \$.74D-, 7237 J 782\*P%2'7, B\$766  
8 P#H! 8%7%2"72"-.- # )\*! 8%742\$MA2\$ )&2)0A2'-. #, B,72A7A2\$B' / )0I537, 64



8 PIH 6S 02+U\*%& I%DS, 3240\$2\$%A3\$)". / )-7, > "E2\$S> \$.7, 6)F.3%A\$ )\$ , #.B> "72"2, B3% / -7%6B)"72"7%, B,-CB,\$7-. #B' / )0%A / "2-\$, 4  
\*N-\$LB/ "7B'33\$, -,% )C4  
View to the Southwest,  
11/16/2007  
' 8 WH  
Date Constructed/Age  
and Sources: 1957, City  
of Riverside Planning  
Dept. Address Files  
X Historic Prehistoric  
J8 CH ; F, \$+%, C2CC+\$001  
City of Riverside  
3900 Main Street  
Riverside, Ca 92521  
J8 XH / \$2&C\$C%61%> \$B  
"&2"7% B". / )' / 2\$, 40  
Tanya Rathbun Sorrell  
Modern Riverside.com  
3638 Linwood Place  
Riverside, CA 92506  
J8 YH 6 #"\$%  
+\$2&C\$C 02/01/08  
J8 GH ! 1+ES5%5USI%7\$\$. ,-=)\$P)  
Q"2-&2-")R\$#-,7\$2)  
O%&- "7%

J8 GGH / \$U&+2\$%3'"4=L1 "9D)\*9-, 7)"724A\$, )". / )3%\$, 4 none  
3""#2. @S "0I O%\$ 9%8"7%): " ; IT\$78): " ; X Q%7-.A"7% )I 8\$S7 X HA-7-.- #B'72A7A2\$B' / J 0I537)R\$3%2/  
+238"\$9%8'3"7)R\$3%2/ D-, 7237)R\$3%2/ 9-.\$ "2)U\$7A2\$R\$3%2/ :- ?-.)I7"7%.)R\$3%2/  
R%8T)+27)R\$3%2/ +27-&37)R\$3%2/ ! 8%742\$MA2\$ )&2)0A2'-. #, B,72A7A2\$B' / )0I537, 64

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % > = ! % : 6 % / 7 ( / 7 3 - > ; :

( ; :- > : ? 3 - > ; : % @ 7 7 -

8 + \* A # + 5 B

@ / > B 115318

- + \* , & A # )

8 # 4 \$ 2 & ' 9

! / \$ 0 & + 2 \$ % # A \$ % & - B % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C / \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G 6 # " F 02/01/2008

X ( & " % , 1 # " % &

? G D # " S

## Description (continued):

Central Fire Station is a one-and-two-story flat-roofed structure constructed in 1957. It is irregular in plan, composed of four intersecting volumes which are each loosely organized around a function: the apparatus room, hose tower, dormitory/administrative wing, and the station office. The one-story apparatus room makes up the eastern half of the building, the station office makes up the first and second floors of the western half, and the hose tower and dormitory/administrative wing are attached to the rear of the apparatus room and station office. The second story of the station office is defined by a solid-looking rectangular volume set on top of the first floor. The second story hangs over the front of the first floor, supported by three thin steel *pilotis* spaced evenly apart along the front of the overhang. The apparatus room, dormitory/administrative wing and first story of the station office are faced in low-profile red bricks, while the second story of the station office is sheathed in smooth-textured plaster. The hose tower is unpainted poured concrete.

The front elevation is separated into three focal points: the apparatus room, station office, and the second-story overhang. The apparatus room is cut with about a 65-foot-wide opening (without internal supports), separated into three bays by steel piers topped by a steel beam. Brass lettering which reads "Central Fire Station" is set on the beam atop the center bay, which is larger than the two side bays. All three bays are closed with metal roll-up doors. The garage doors have been replaced ca. 1990, but the existing doors occupy the same openings and appear compatible with the rest of the building. A solid door to the right (west) of the bays provides access to the apparatus room when the bays are closed. The station office has a comparatively modest entrance beneath the second-story overhang, through aluminum-framed glass double doors, which are flanked on the left (east) side by a square wood-framed picture window. A concrete walkway runs straight from the sidewalk to the office door, and then turns a right angle toward the bays. A brick planter with manicured shrubbery is set on the right side of the walkway. The second-story is characterized by a horizontal band of wood-framed metal windows with four vertically-aligned lights each. The bottom light of each window opens inward, hopper-style, and the window on the left end is wrapped around the left corner of the overhang.

The east side elevation (facing Lime Street) is composed of a brick wall covered in ivy. About 50 feet back from the façade the brick wall projects out about 25 feet towards Lime street and continues at that line to the rear elevation. A pair of wood-framed casement windows, each divided into a column of three-lights, are set into the north-facing side of the projection, which formerly housed a maintenance shop (now a weight room). The west side elevation is broken visually into three parts: the side of the first and second floors of the station office and a two-story brick cube-shaped dormitory/administrative wing attached to the station office. The dormitory/administrative wing houses the dormitory on the second floor and additional office space for the Fire Department staff on the first floor. It steps about three feet out from the rest of the side elevation. Each floor of the main station features a row of wood-framed casement windows that are almost identically spaced. The rows each consist of a single window, followed by three windows in one frame, and two top-aligned, shorter single windows. Instead of the single windows, the bottom row ends with another trio of windows. All of the windows have rectangular louvered sunshades made of aluminum, which are attached to the top of the window frame by hinges. The brick planter featured on the façade wraps around the side elevation of the station, planted with mature shrubbery. The side of the dormitory/administration wing is cut with a single-door entrance and two square openings fitted with vents.

The rear elevation is broken into four parts (from right to left): the rear of the maintenance shop, the rear of the apparatus room, the hose tower, and the rear of the dormitory/administrative wing. The maintenance shop, which projects outward from the apparatus room by about eight feet, is cut with one rectangular bay fitted with a roll-up door. The rear of the apparatus room bears a nearly identical resemblance to the front, with one large bay flanked by two smaller bays, all fitted with roll-up garage doors. The hose tower is about 40 feet high, and is composed of poured concrete topped with a louvered metal cap for ventilation. At the ground floor, rectangular vents are set into each exposed side of the tower. A single door on the west side of the hose tower rests on a low concrete step, to the right of the vent on that side. The second floor of the dormitory/administrative wing is adorned with three trios of wood-framed, three-light windows. Like the windows on the façade of the station office, the bottom light opens hopper-style. These windows are shaded by louvered aluminum shades attached to the top of the window frames. Similar louvered shades are also attached to two pairs of wood-framed, three-light windows on the ground floor, and over some electrical equipment to their left.

(continued)

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % 3 = ! % 3 : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 B \_\_\_\_\_

@ / > B 115318 \_\_\_\_\_

- + \*, & A #) \_\_\_\_\_

8 # 4 \$ 3 & ' 9 \_\_\_\_\_

! / \$ 0 & + 2 \$ % # A \$ % & - B % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

C 6 # " F 02/01/2008

X ( & " % , 1 # " &

? G D # ' S

### Description (continued):

The interior has retained most of its original uses in their original spaces with the spatial arrangement and floor plan mostly intact. The fireman's poles that lead from the second story to the apparatus room are intact and continue to be used. In 1996, the interior of the fireman's quarters were remodeled, partitioned into 9 individual rooms. Around the same time, the former dispatch office (located within the second story overhang) was removed and the space was remodeled for the Battalion Chief's office, with a new interior wall to create a small sleeping area. The maintenance room has been re-used as a weight room, but the characteristic features of the maintenance room (such as the undercarriage access pit and an I-beam used to remove engines) are extant. A wood-framed storage room was created in the maintenance room sometime in the last 20 years.

With the exception of the garage door replacement, a re-roof, and some interior partitioning of the dormitory, maintenance room, and station office, Central Fire Station remains remarkably intact and retains a high degree of integrity of design, materials, workmanship, feeling, association, and setting.

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾

6 7 8 3 / - 9 7 : - % < 3 / = ! % : 6 % 7 ( / 7 3 - > ; :

? @ > A 6 > . B C % - / @ ( - @ / 7 C % : 6 % ? D / ( - % 7 ( ; / 6

8 + E # + 5 %

G / > F 115318

!"#\$ 4 %& 9 : / G 8 % "# 10 % & H 3CS ' / \$ 0 & + 2 \$ % # E \$ % & % ( ) \* + , - . \$ / ) 0 1 2 3 % \$ 24 Central Fire Station

? I J G \* 0 ' & + 2 % # E \$ K Central Fire Station

? L J ( & E E & % # E \$ K Fire Station No. 1

? M ; + 4 \* , # ) % 0 \$ K Fire Station and Fire Department Headquarters ? N P % + \$ 0 \$ " % @ \$ K Fire Station and Fire Department Headquarters

Q P J 3 + 2 . \* ' 2 ' 1 + # ) % ' 5 ) \$ K International

Q Q ( & 0 ' + 1 2 % & % 0 ' & + 5 K % 5 % , 6 2 7 3 6 % ) " 6 8 " 9 6 2 " 6 % , 8 " . / ) " 6 ) 8 " 9 6 2 " 6 % , 4

Constructed 1957, existing maintenance shop partition extended for storage ca. 1985, first floor partitioned for video room ca 1989, apparatus room doors replaced ca.1990, re-roofed 1996, interior partitioning of dormitory 1996, former dispatch partitioned and remodeled for office ca. 1996.

Q R J 9 & S H T X : & U \$ 0 @ V , & W 6 # " \$ K ; + 4 \* , # ) % & 2 " % & K

Q X J / \$ ) # " S H % \$ # " 1 + \$ 0 K

? Y # 3 + 2 . \* ' 2 " K Bolton C. Moise, Jr.

? Y Z % 1 \* ) H % + K Cal Construction Company

Q I J ! 4 , \* 2 # , 2 \$ K % \$ E \$ International Style Architecture

3 + \$ # City of Riverside

8 \$ + \* H P & % 4 , \* 2 # , 2 \$ 1957 8 + & \$ + 5 % 5 \ \$ Fire Station 3 \ \ ) 2 # Z ) \$ % + \* ' \$ # 3 (CR)

\* : -, 37, , ) - ; < % 8 . 3 \$ ) - . ) 6 2 , ) % 8 = , 6 % 2 3 " 9 ) % 1 " 2 3 = 6 3 6 7 2 " 9 ) 3 % 6 \$ > 6 " , ) / \$ & \$ / ) 0 1 ) 6 = \$ \$ 8 < \$ 2 % 8 ) " . / ) # \$ % 2 " < = 3 , 3 % 6 \$ ? ) + 9 , % 9 " / 2 \$ , , - 6 \$ # 2 6 1 4

Central Fire Station appears eligible for the California Register under criterion 3 at the local level as an excellent example of the International style applied to an institutional building in Riverside. It is the one of few (if not only) International-style institutional buildings in downtown Riverside. It conveys several character defining features of the style in its massing, fenestration, and decorative detailing. (see continuation sheet)

? I I J 3 H I P % & , # ) % \$ 0 & + 2 \$ % " + \* Z 1 ' \$ 0 K % ( , 6 ) " 6 2 0 7 6 , ) . / ) 3 % \$ , 4 none

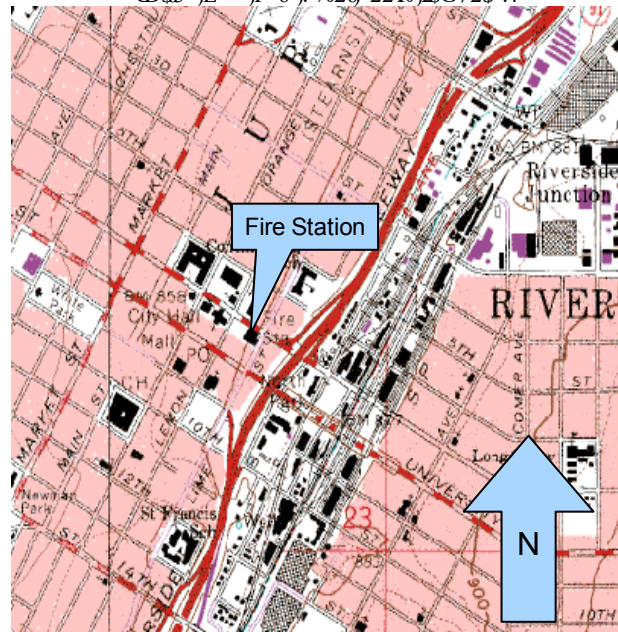
Q I L J / \$ ' \$ + \$ , 2 \$ 0 K (see continuation sheet)

? I M / \$ E # + V 0 K

Q I N 7 S # ) 1 # " & K Tanya Rathbun Sorrell, M.A., ModernRiverside.com 06 # " \$ & % S # ) 1 # " & K 02/01/2007

\* A = , ) , < " 3 \$ 2 \$ \$ 2 B \$ ) & 2 % 8 8 3 - " 9 3 % ; \$ . 6 4

\* C \$ 3 = E " < ) F - 6 - . % 2 6 " 2 2 % 2 \$ G 7 2 \$ 4



!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % 3 = ! % 3 : 6 % / 7 ( / 7 3 - > ; :

( ; :- > : ? 3 - > ; : % @ 7 7 -

8 + \* A # + 5 B

@ / > B 115318

- + \* , & A # )

8 # 4 \$ 5 & ' 9

! / \$ 0 & + 2 \$ % # A \$ % & - B \$ % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G # " F 02/02/2008

X ( & ' % , 1 # " % & ? G D # ' \$

### Significance (continued):

At the close of World War II, the City of Riverside, and Southern California generally, experienced an unprecedented boom in new construction. Returning GIs took advantage of low federally-funded mortgage loans to purchase new homes, further increasing the backlog of new construction that was initially created by the Great Depression and war effort. Builders constructed vast tracts of California Ranch style residences, commercial developers expanded on the concept of regional commercial centers, and City governments scrambled to establish new services to support their expansion. New technologies that were developed in conjunction with the war effort made modern building techniques and design both affordable and attractive to the general public.

The City of Riverside felt the postwar pressure for expansion acutely due to its proximity to March Air Force Base. Enlisted men, their families, and civilian employees in support services settled throughout Riverside. New industries seeking lucrative defense contracts and other work in the expanding postwar economy located their plants in Riverside, selecting lots in the widely promoted Hunter Industrial Park, along the ATSF railroad tracks near Downtown, and in areas west of Riverside like La Sierra and Arlanza. They selected Riverside partially because of the City's reputation as one of the best places to live (*Press Enterprise* 5/4/1958), which they believed would attract stable, skilled employees. In 1953, the *Press Enterprise* reported that Riverside was fourteenth among the fastest growing cities in the western United States (*Press Enterprise* 9/28/1953). In 1955, Riverside received the title "All American City" from the National Municipal League, which drew the attention of expanding industries such as the Lily Tulip Cup Corp (*Press Enterprise* 5/4/1958). From 1940 to 1960, the population within Riverside city limits more than doubled, adding 49,636 new residents (Census 1940-1960).

In response to the de-facto expansion happening in and around the City, Riverside City Council launched a Capital Improvements Program in the early 1950s, a major effort to improve City services. In 1952, the City put a \$440,000 bond measure on the ballot for the construction of a new fire station to replace the original downtown station on Eighth Street (now University Ave) (*Press Enterprise* 11/14/52). To sell the bond measure (called Proposition 2) to Riverside voters, the City commissioned local architect Herman Ruhnau to create a conceptual drawing of the new fire station, with bold rectangular forms intersecting to create engine bays, a hose tower composed of dramatic horizontal louvers and a poured concrete shell framing the office (ibid). Voters apparently did not approve the bond measure because the City came back to the voters in 1955 with a \$665,000 bond measure for the new downtown fire station and two substations in the City. Voters approved this measure in April 1955 (*Press Enterprise* 6/17/1955).

Although Herman Ruhnau had prepared conceptual drawings for the new fire station in 1952, the Council chose to award a contract for the design of all three fire stations to architect Bolton C. Moise, Jr. The style and architectural detail of Moise's fire station was similar to Ruhnau's concept, but instead of making the office a focal point he suspended the fireman's quarters over the office, supported by thin metal poles. Instead of using plaster and poured concrete throughout, Moise faced the office and engine bays in low-profile bricks, which had become a popular material in mid-century Modern architecture. Cal Construction Company broke ground on the new fire station in April 1956, and finished the building by March 1957. The final cost was about \$340,000 (*Press Enterprise* "Dream Come True" 3/23/1957).

The *Press Enterprise* reported on the public's excitement over the grand opening of Central Fire Station. On March 26, 1957, the City held an all-day open house to, as Riverside Fire Chief Ray Allen put it, "be open for the inspection of the general public, the people who are paying for the station" (*Press Enterprise* "Dream Come True"). The Ladies Auxiliary of the Riverside Fire Department provided refreshments for hundreds of visitors, who came from all over Riverside to see inside the "sparkling new building" (*Press Enterprise* "Crowds Visit New Station" 3/26/1957). The City Council and Mayor interrupted their morning session to participate in the ribbon-cutting ceremony and formal dedication. In his comments, Mayor Dales expressed that "this is something that we've been looking forward to for a long time. We are extremely proud of this beautiful - and functional - building" (ibid).

The design of Central Fire Station incorporated all of the modern necessities and conveniences made possible by postwar technology. Far removed from the horse-drawn fire engine of the late 19th and early 20th centuries, the modern fire station needed larger bays to accommodate fire engines that carried their own pumps, hoses, and ladders. Radio technology developed for WWII became central to a more organized emergency response in the office. The architectural floor-plan of fire stations changed to better reflect the wide variety of uses needed under one roof. Dormitory and living quarters became better integrated with modern kitchen and bathroom conveniences (Zurier 1982).  
(continued)



**Significance (continued):**

Prior to the 1955 bond measure, the last fire station constructed in Riverside was in 1937 at the corner of 8<sup>th</sup> and Franklin Streets in the Eastside neighborhood. Now demolished, this station was Spanish Colonial Revival in style, and continued the traditional form of early 20th century fire stations (Lewis and Moses 1983). When Central Fire Station opened it was both functionally and stylistically a significant departure from earlier fire stations because it incorporated modern technology and conveyed a sense of urban modernity to the City's urban core. The other two stations constructed at this time also incorporated modern technology and referenced the modern idiom in their architecture, but their suburban setting restricted their scale and architectural style. In the 1962 the City constructed additional stations in the Eastside and Magnolia Center neighborhoods. These were also modern in character with the latest in fire suppression and communication technology, but stylistically are more residential in character to fit in with their suburban settings. Within the past ten years the City has returned to using a more blocky, urban massing for new fire stations, but changes in style and technology have eliminated the use of once common features like sliding poles and hose towers.

Moise built two other fire stations in Riverside in 1955, under the same contract to the City as Central Fire Station. One is located at 6963 Streeter Avenue near Arlington Avenue (now closed and boarded-up), and the other one is 2239 Main Street near Russell Street (recently demolished). Both of these substations exhibited architectural details popular in Mid-Century Modern styles like grid-aligned windows, low profile brick veneer, and asymmetry in the form. However, because of their smaller size and proximity to neighborhoods, Moise designed these stations with a more residential character as opposed to the urban character of downtown.

In addition to its role in fire suppression downtown, Central Fire Station served as the administrative center of the City Fire Department, providing space for administrative staff, the Division of Fire Prevention, the Alarm Division and Alarm Center, maintenance shops, and the office of the Fire Chief (*Press Enterprise* "Dream Come True" 3/23/1957). Some of these additional functions were housed on the first floor of the dormitory/administrative wing, a cube-shaped mass attached to the rear of the station office.

In October of 1958, Pittsburgh Plate Glass ran an article in their promotional newsletter about Central Fire Station, describing it as a "Push Button Fire Station ... a new concept in the design of a fire station" (PPG Products, October 1958). Amidst glowing prose about the advances of the modern fire station in terms of radio technology, heating and air conditioning, and chrome plating on fire engines, the newsletter cited one "major departure in station house design." Moise restricted second-floor access from the fireman's quarters to the apparatus room to a row of sliding poles on one side, rather than creating access from both sides. This meant that the fireman's quarters did not need to sit directly over the apparatus room, reducing construction costs and eliminating the need for column supports in that part of the fire station (ibid).

**International Style Architecture**

Derived from the International style of architecture developed in Europe by architects such as Walter Gropius, Mies Van der Rohe, and Le Corbusier beginning in the early 20<sup>th</sup> century, the International style received its name from exhibit materials created by Art Historians Henry Russell Hitchcock and Philip Johnson for the 1932 International Exhibition of Modern Architecture at the Museum of Modern Art in New York City (Curtis 1996). The style is defined by clean, geometric planes, use of glass, brick, and concrete to create volume and define space, and a unification of interior and exterior living areas (Gleye 1981; Gebhard & Winter 1985). The movement was influenced heavily by Cubism, De Stijl and Expressionism in painting; some architecture writers have even suggested that the International style is Cubism and De Stijl applied to architecture (Frampton 1992, Curtis 1996). Although the International style did not become the dominant form of architecture internationally, the modularity of its architectural elements and the emphasis on connecting indoor and outdoor space allowed a nearly universal application of the style to varying terrains and climates.

In the early 1920s, Viennese architects Rudolph Schindler and Richard Neutra immigrated to Southern California to work with Frank Lloyd Wright, and soon after designed homes that became known as the earliest examples of the International style in California (Gleye 1981, Gebhard and Winter 1965). The International style flourished in the southern California architectural scene of the 1930s, especially for residences in the Hollywood and Silverlake areas of Los Angeles. The style spread from residences to apartments within the late 1930s and 1940s (ibid). While International-style residential architecture continued to fare well in southern California, the International style did not influence commercial and institutional architecture as it had in Europe until after World War II. (continued)

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % 3 = ! % 3 : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 B \_\_\_\_\_

@ / > B 115318 \_\_\_\_\_

- + \* , & A # ) \_\_\_\_\_

8 # 4 \$ 7 & ' 9 \_\_\_\_\_

! / \$ 0 & + 2 \$ % # A \$ % & - B % \$ & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G # " " F 02/01/2008

X ( & ' % , 1 # " % & ? G D # ' \$

### Significance (continued):

While better-known modern architects such as Craig Ellwood, William Pereira, and Welton Becket went on to make modernism a household word throughout post-WWII southern California, several modern architects focused on designing modern buildings in Riverside. As the County seat and the site of considerable residential expansion, Riverside had plenty of institutional contracts for local architects like Bolton Moise and Herman Ruhnau. Through the 1950s and 60s, Moise designed the City's Main Branch Library [1965] and three fire stations [1955-57], while Ruhnau designed the County Probation building [1960], Marcy Branch Library [1958], and the Police Station [1965]. These were all constructed in a Mid-Century Modern vernacular, but mostly reflected other styles like New Formalism or Corporate Modern.

Bolton C. Moise, Jr., A.I.A. came to inland southern California after he was discharged from the U.S. Army in 1946. The following year, he set up his practice in downtown Riverside, and over the following 23 years he designed many prominent public and educational buildings, including the Main Branch of Riverside Public Library, portions of Ramona High School, Polytechnic High School, and several elementary schools in Riverside and Imperial counties. (*Press Enterprise* "Architect of Riverside Landmarks Dies at 84" 11/11/1984) Prior to his service in World War II, Moise had been a practicing architect in the northeastern U.S. He graduated from Harvard University School of Architecture in 1931 and spent two years studying in Paris under architect Eduard Leon. When he returned he helped design the New York Museum of Modern Art, the interior of the Communications Building at the New York World's Fair in 1939, and several residences and apartments in Boston. He also worked for some time as a designer for General Motors (ibid). (continued)

In the 1950s and 60s, Riverside School District also underwent a major expansion of their facilities, and they hired both Ruhnau and Moise along with Los Angeles-based architects to construct modern schools. Early in the 1950s, Westwood-based architect Milton Caughey designed several elementary schools in Riverside using International-style form and architectural detail. For Pachappa and Monroe Elementary schools Caughey won awards from the American Institute of Architects (AIA). In 1956, Caughey, Moise, Ruhnau, and Henry Wright (part of the firm who designed the IBM building at 3610 14th Street) teamed together to design Ramona High School, which exhibits several International-style buildings. Bolton Moise went on to design Poly High School in 1964, using some International-style form and detail. The California School for the Deaf in Riverside referenced the International style in several of the buildings on their campus, which was constructed in 1951 (architect not known). In addition, Albert Frey and other notable architects designed several buildings at the University of California, Riverside in the 1950s and 60s using Mid-Century Modern vernacular, referencing New Formalism and International in particular.

Though the International style was popular in Riverside for primary, secondary, and college campus buildings, these are dispersed around the City. There are few, if any, other examples of the International style applied to an institutional building in Riverside's downtown. Most of the other Mid-Century Modern institutional buildings constructed in Riverside appear to be inspired more by the design elements of New Formalism and Corporate Modern, which use some of the same architectural details as the International style but in a way that emphasizes symmetry, balance, and grid-like geometry (Whiffen 1992). The Press-Enterprise office [1954, Herman Ruhnau] stands as the best commercial example of the International style in downtown Riverside, with an asymmetrical breakdown of the facade into a flat marble plane on one side and a rectangular porch-like space created by a row of right-angled beams on the other side.

According to architectural historian Marcus Whiffen, the International style is characterized by a complete absence of ornament, an emphasis on volume and asymmetry over mass and weight in the composition, flat roofs, smooth uniform wall surfaces, windows with minimal exterior reveals, and windows that turn the corner of the building (Whiffen 1992). The style commonly employs cantilevered and *pilotis*-supported overhangs for upper floors and balconies.

Central Fire Station exhibits many character-defining features of the International style, particularly in the deconstruction of the building's functions into intersecting geometric forms, horizontal bands of windows, and the use of brick and smooth plaster to define space. The overhang supported by *pilotis* that characterizes the station office is a particularly distinctive element of the fire station that defines the entryway space below it and creates a dynamic relationship with the sidewalk. It is reminiscent of Le Corbusier's *Villa Savoye*, constructed over a quarter of a century earlier. Milton Caughey also used this distinctive overhang style in the Barry Building in Brentwood, the year before Caughey and Moise worked together on Ramona High School and two years before Moise designed Central Fire Station. The louvered rectangular screens on the west side and rear elevations are important decorative elements common to the International style in the post-WWII era.

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 - 9 7 : - % < % / 3 = ! % : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 B

@ / > B 115318

- + \* , & A # )

8 # 4 \$ 8 & ' 9

! / \$ 0 & + 2 \$ % # A \$ % & B % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G # " F 02 // 2008

X ( & ' % , 1 # " % & ? G D # ' \$

## References (continued):

Caughey, Diane. City of Los Angeles Historic Cultural Monuments Nomination for the Barry Building. On File, City of Los Angeles Office of Historical Resources. March 24, 2007.

City of Riverside Building Permits, Planning Department Address Files. Accessed 12/14/2007.

Curtis, William J. R., *Modern Architecture Since 1900*. Oxford, Phaidon Press 1996. Third Edition.

Frampton, Kenneth. *Modern Architecture: A Critical History*. London: Thames & Hudson Ltd, 1992

Gebhard, David, and Robert Winter

*A Guide to Architecture in Southern California*. Los Angeles: Los Angeles County Museum of Art, 1965.

*Architecture in Los Angeles*. Salt Lake City: Peregrine Smith Books, 1985

Gleye, Paul. *The Architecture of Los Angeles*. Los Angeles: Rosebud Books, 1981

Henry Russell Hitchcock and Philip Johnson. *The International Style*. Reissue from original exhibition book from 1932. New York, W.W. Norton and Company, 1995.

Lewis, Richard and Vincent Moses. *A Century of Service: A Pictorial History*. Riverside, The Riverside Firemen's Benefit Association, 1983.

The Los Angeles Fire Department Historical Archive. <http://www.lafire.com>. Last Accessed December 28, 2007.

*The Press Enterprise*, Riverside, California. On File, Riverside Local History Resource Center, Riverside Public Library.

"Old Fire Station Unsafe, Decrepit." 11/14/1952

"Fire Station Construction Planned." 6/17/1955

"Dream Come True: New Central Fire Station Dedication Includes Public Open House Program." 3/23/1957.

"Crowds Visit New Fire Station." 3/26/1957

"Lily Cup Plant Opens Today." 5/4/1958

"Architect of Riverside Landmarks Dies at 84" 11/11/1984

Pittsburgh Plate Glass Company. "Push Button Fire Station." In *Pittsburgh Plate Glass Products*. October 1958. On File, Riverside Local History Resource Center, Riverside Public Library.

Sharp, Dennis. *A Visual History of Twentieth-Century Architecture*. New York Graphic Society, Ltd, 1972.

Whiffen, Marcus. *American Architecture since 1780*. Second edition published by the Massachusetts Institute of Technology, 1992.

Zurier, Rebecca. *The Firehouse: An Architectural and Social History*. New York: Abbeville Press, 1982.

!"#\$%&'()\*+,-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

6 7 8 3 / - 9 7 : - % < % % = ! % : 6 % / 7 ( / 7 3 - > , :

( ; :- > : ? 3 - > , : % @ 7 7 -

8 + \* A # + 5 % B \_\_\_\_\_

@ / > B 115318 \_\_\_\_\_

- + , & A # ) \_\_\_\_\_

8 # 4 \$ \_ 9 \_ & ' \_ 9 \_

! / \$ 0 & + 2 \$ % # A \$ % & - 7 % \$ % & ( ) \* + # - # \* / 0 . + \* . 1

Central Fire Station

C \$ 2 & + D \$ D % 5 Tanya Rathbun Sorrell, M.A.

G # " F 02/01/2008

X ( & ' % , 1 # " % & \_\_\_\_\_ ? G D # ' \$

### Photographs (continued):

View to the northeast, rear elevation (1/7/2008)



View to the east, side elevation (1/7/2008)



## Attachment B: Curriculum Vitae

## JENNA SNOW



In January 2015, Jenna Snow launched an independent historic preservation consulting practice with offices in Los Angeles. With twenty years of professional experience, Ms. Snow has a strong and broad understanding of best historic preservation practice, including federal, state, and local regulations. Throughout her career, Ms. Snow has authored, co-authored, and/or served as project manager for over 100 historic preservation projects, including a wide variety of historic resource assessments, National Register, California Register, and local nominations, as well as historic resources surveys. She regularly contributes to environmental impact reports, historic preservation certification applications, Section 106 reviews and other work associated with historic building rehabilitation and preservation planning. For five years, she served on the board of the South Carthay Historic Preservation Overlay Zone in mid-city Los Angeles.

### EDUCATION

Columbia University in the City of New York, Master of Science in Historic Preservation, 2002

Brandeis University, Bachelor of Arts in Fine Arts, 1998

### QUALIFICATIONS

Secretary of the Interior's Professional Qualifications Standards in Architectural History

LEED GA

### AWARDS

Rosalind W. Levine Prize for excellence in Fine Arts, June 1998

### COMMUNITY INVOLVEMENT

Secretary, South Carthay Historic Preservation Overlay Zone Board, 2011-2016

Pick Leader, Food Forward, 2011-present

Los Angeles Conservancy ModCom Working Group, 2013-2014

Guest Editor, *The Next American City*, Fall 2006, Issue 12

New Orleans recovery team from Western Regional Office of the National Trust for Historic Preservation, February 2006

### PROFESSIONAL EXPERIENCE

Jenna Snow, Historic Preservation Consulting, January 2015-present

Chattel, Inc., Los Angeles, CA, July 2002 – December 2014

International Council on Monuments and Sites, Transylvania Trust Foundation, Cluj-Napoca, Romania, Fall 2004

Neighborhood Preservation Center, New York, NY, Spring 2002

New York City Department of Design and Construction, Historic Preservation Office, New York, NY, Summer 2001

The Freedom Trail Foundation, Boston, MA, January 1999 - October 1999

### SELECTED PROJECTS

Temple Ohave Israel (Brownsville, PA) – Prepared a National Register nomination for a 1919 synagogue located in a small, economically depressed town of western Pennsylvania. The synagogue, significant as an anchor for the small, but influential Jewish community of Brownsville, PA, was listed in the National Register in February 2016. Listing in the National Register makes the property eligible for state grants to maintain the building, including replacement of a much needed roof.

Hawk House (Los Angeles, CA) – Prepared a successful Historic Cultural Monument nomination for a 1939 single family residential house designed by renowned Los Angeles architect Harwell Hamilton Harris for Stan and Ethyl Hawk. The house served as the headquarters for the furnishing company “Hawk House.”

Chuey House (Los Angeles, CA) - Prepared a Historic-Cultural Monument nomination for a single family residence designed by one of the most influential Los Angeles architects, Richard Neutra, in 1956. As the property was for sale, the house was threatened with demolition. While the nomination was ultimately withdrawn, it served as a negotiation tool for the Los Angeles Conservancy.

Frank's Camera (Los Angeles, CA) – Completed a Historic Structures Report in support of a Mills Act Contract for a former S.H. Kress & Co., a five-and-dime-store. A contributor to the Highland Park-Garvanza Historic Preservation Overlay Zone, the building was constructed in 1928 and is undergoing a rehabilitation to convert the building to smaller retail spaces. The building serves as a visual and economic anchor to the revitalizing commercial strip along North Figueroa.

Monday Women's Club (Los Angeles, CA) - Prepared a historic resource assessment for a black women's club in the Venice neighborhood. Moved to the site in 1926, the building on the property was proposed for demolition. Worked with the project team on a focused EIR that studied alternatives.

**Additional Projects:**

Commodore Apartments (Los Angeles, CA) - Process Investment Tax Credit application for a 1926 Hollywood apartment building that completed a major rehabilitation project. The rehabilitation carefully restored the primary façade, which had experienced multiple alterations over the years.

West Los Angeles Veteran's Affairs (Los Angeles, CA) – Between 2010 and 2014, prepared Section 106 review and consultation for the first of 11 buildings that are undergoing seismic retrofit and limited rehabilitation. The buildings will be reused to house veterans who are homeless. The rehabilitation won a Los Angeles Conservancy award. Also prepared a successful National Register nomination for the whole campus, which was listed in November 2014. Work was done at Chattel, Inc. as a subconsultant to Leo A. Daly.

West Los Angeles Veteran's Affairs Building 205 and Building 208 (Los Angeles, CA) - Process Investment Tax Credit application and Section 106 review for two buildings out-leased to a nonprofit developer. The two buildings will be rehabilitated to house homeless veterans. Work is estimated to be complete in 2021.

Boyle Hotel/Cummings Block (Los Angeles, CA) – Completed Investment Tax Credit Application and National Register nomination for 1898 hotel in Boyle Heights neighborhood of Los Angeles. The building has been reused to house low-income residents of Boyle Heights and has been a catalyst for economic rehabilitation in the neighborhood. The rehabilitation won a Los Angeles Conservancy award, as well as a National Preservation Honor Award. Work was done at Chattel, Inc. for the East Los Angeles Community Corporation.

Breed Street Shul Project, Inc. – Project Manager for Phase 1 seismic stabilization and stained glass window restoration. Provided design review and construction monitoring and prepared historic review documentation for local environmental review. Consulted with federal agencies on Section 106 compliance for a FEMA grant and a federal appropriation. Work was done at Chattel, Inc.

Historic Resources Survey Update (Los Angeles, CA) - Served as the project manager for preparation of historic context statements and intensive-level historic resource survey. The survey were prepared in close coordination with the Los Angeles Office of Historic Resources to dovetail into SurveyLA. Surveyed approximately 3,000 properties, including property-specific research on approximately 400 of these properties. Attended several public hearings at both the beginning and end of the process, as well as presented at nearly a dozen neighborhood council meetings. Work was done with Chattel, Inc.

Judson Rives Building (Los Angeles, CA)– Completed Investment Tax Credit Application for a 1908 office building in downtown Los Angeles, a contributing resource to the Broadway Historic District that was converted to residential use. Work was done at Chattel, Inc.

Hollywood Profession Building (Los Angeles, CA) - Completed Investment Tax Credit Application for a 1926 office building on Hollywood Boulevard. The building is significant not only for its distinctive Neo-Gothic style, but also with for its association with former United States President Ronald Reagan. The office building was converted to residential use. Work was done for Chattel, Inc. for CIM Group.

Residential Survey (Whittier, CA) - Prepared a historic context statement focusing on architectural contexts and themes connected with residential development in Whittier. Feld surveyed approximately 1,540 properties generally constructed prior to 1941 using an Access database incorporating GIS mapping to collect survey data in the field. The survey was prepared in close coordination with the City of Whittier staff and Historic Resources Commission and was adopted by the City of Whittier in 2015. Work was done with Chattel, Inc.

SurveyLA City of Los Angeles (Office of Historic Resources) – Participated in completing a historic resource survey of over 97,000 properties in South and Southeast Los Angeles. Co-authored historic context statement of Los Angeles' industrial history. Work was done at Chattel, Inc.

# EXHIBIT C



**EXHIBIT C:  
INCONSISTENCIES WITH PLAN OBJECTIVES AND POLICIES**

<b>I. GENERAL PLAN</b>	
<b>A. Land Use and Urban Design</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Objective LU-48:</i> Strengthen the identity and character of Downtown using the existing historic and architectural urban character of the community, while allowing for new structures that are architecturally compatible with and complementary to the existing architectural and historic fabric.</li> <li>• <i>Policy LU-48.1:</i> Encourage mixed-use development with a strong residential presence, including both new construction and the conversion of upstairs spaces in existing buildings.</li> <li>• <i>Policy LU-48.3:</i> Create a sense of arrival at key Downtown gateways, reinforcing the City's natural, cultural and historic characteristics.</li> <li>• <i>Policy LU-48.5:</i> Encourage housing beyond the traditional residential neighborhoods as a means of making Downtown a twenty-four hour neighborhood.</li> <li>• <i>Policy LU-48.6:</i> Provide a variety of housing options, including medium- and high-density apartments and condominiums, live/work loft space and mixed-use buildings with significant residential components.</li> </ul>	<p>Contrary to the implementing policies, the Project does not include residential uses or create a sense of arrival at a key Downtown gateway. (Policies LU-48.1, LU-48.3, LU-48.5, LU-48.6.) It detracts from the City's cultural and historic characteristics by being incompatible with the mass, scale, size, and proportions of the buildings within its immediate vicinity. (LU-48.3.)</p>
<b>B. Circulation Community Mobility Element</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Objective CCM-13:</i> Ensure that adequate on- and off-street parking is provided throughout Riverside.</li> <li>• <i>Policy CCM-13.1:</i> Ensure that new development provides adequate parking.</li> </ul>	<p>Per Code, the Project is short 82 parking spaces. Contrary to the General Plan, the City has not applied parking regulations so as to avoid increased traffic volumes and congestion. (General Plan, p. CCM-35.)</p>
<b>C. Noise Element</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Objective N-1:</i> Minimize noise levels from point sources throughout the community and, whenever possible, mitigate the effects of noise to provide a safe and healthful environment.</li> </ul>	<p>The General Plan and Riverside Municipal Code ("RMC") limit noise levels to the maximum permitted exterior noise level for the affected use. (General Plan, p. N-13; RMC, Chapter 7.25.) The maximum</p>

<ul style="list-style-type: none"> <li>• <i>Policy N-1.3</i>: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.</li> </ul>	<p>exterior levels for office/commercial uses is 65 dBA at any time. (RMC, Table 7.25.010A.) The Environmental Checklist (“EC”) states that construction noise levels would exceed 65 dBA at 3 of the 5 receiver locations.<sup>1</sup> (EC, p. 11 and Exh. D, Table 7-3.) The Project conflicts with the General Plan and results in significant but undisclosed noise impacts.</p>
<p><b>D. Historic Preservation Element</b></p>	<p><b>Project is Inconsistent with Plan Objectives and Policies</b></p>
<ul style="list-style-type: none"> <li>• <u>Objective HP-1</u>: To use historic preservation principles as an equal component in the planning and development process.</li> <li>• <i>Policy HP-1.1</i>: The City shall promote the preservation of cultural resources to ensure that citizens of Riverside have the opportunity to understand and appreciate the City’s unique heritage.</li> <li>• <i>Policy HP-1.2</i>: The City shall assume its direct responsibility for historic preservation by protecting and maintaining its publicly owned cultural resources.</li> <li>• <i>Policy HP-1.5</i>: The City shall promote neighborhood/city identity and the role of historic preservation in community enhancement.</li> <li>• <i>Policy HP-1.6</i>: The City shall use historic preservation as a tool for “smart growth” and mixed use development.</li> <li>• <u>Objective HP-4</u>: To fully integrate the consideration of cultural resources as a major aspect of the City’s planning, permitting and development activities.</li> </ul>	<p>If approved, the Project may result in substantial adverse changes to the Historic Fire Station, six other historic resources in the vicinity, and two historic districts. The mass, scale, size, and proportions of the Project are incompatible with historical structures in its immediate vicinity. Such impacts have been documented by Jenna Snow and at least two other expert historic preservation consultants.</p> <p>The Project failed to secure approval of Certificate of Appropriateness (“COA”) from the City’s Cultural Heritage Board (“CHB”). Board members in opposition cited the Project’s massing, scale, size, and visual impact.<sup>2</sup></p> <p>As noted in report from GPA Consulting, the Project’s increased height is incompatible with surrounding historic resources and would block existing view corridors of the bell tower on the First Congregational Church of Riverside, a</p>

<sup>1</sup> The construction noise and related impacts are likely understated given that the EC assumed a 12 month construction period whereas the actual construction period appears to be 28-30 months. (EC, p. 16; Project Narrative, p. 3.) Further, to the extent RMC Section 7.35.020 purports to exempt construction noise from the above standards, it is inconsistent with the General Plan and invalid.

<sup>2</sup> Board Member McDaniell pointed out that there had been no study of the immediately adjacent historic resources. (RMC § 20.25.050 [in order to approve COA, Board must find that the application is consistent or compatible with existing adjacent or nearby cultural resources and their character-defining elements].) Board Member Tobin expressed concern with the lack of line-of-site and massing studies especially “given this is the most important location within the Mission Inn and Seventh Street Historic District[s].” (Minutes, CHB, April 21, 2021, p. 4.) He suggested a continuance so that the applicant could provide such studies, both for the current 8-story elevation and the originally proposed 4- to 5-story elevation. The Project applicant declined a continuance to prepare such studies and instead called for a yes or no vote on the COA.

<ul style="list-style-type: none"> <li>• <i>Policy HP-4.1</i>: The City shall maintain an up-to-date database of cultural resources and use that database as a primary informational resource for protecting those resources.</li> <li>• <i>Objective HP-5</i>: To ensure compatibility between new development and existing cultural resources.</li> <li>• <i>Policy HP-5.1</i>: The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.</li> <li>• <i>Objective HP-7</i>: To encourage both public and private stewardship of the City’s cultural resources.</li> <li>• <i>Policy HP-7.1</i>: The City shall apply code enforcement, zoning actions, and building safety/construction regulations as tools for helping to protect cultural resources.</li> <li>• <i>Policy HP-7.2</i>: The City shall incorporate preservation as an integral part of its specific plans, general plan, and environmental processes.</li> <li>• <i>Policy HP-7.3</i>: The City shall coordinate historic preservation with other activities within its government structure.</li> </ul>	<p>character-defining feature of this historic resource.<sup>3</sup> Height limits and other development standards were intended to preserve the view of historic buildings along Mission Inn Avenue from the vantage point of the Riverside 91 Freeway. (Downtown Specific Plan, Policy UD-1-6.)</p> <p>The Project is inconsistent with the General Plan and may cause a substantial adverse change in the significance of historical resources as well as related aesthetic impacts.<sup>4</sup></p>
<b>II. DOWNTOWN SPECIFIC PLAN</b>	
<b>A. Vision, Goals, and Policies</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <i>Policy LU-1.1</i>: Design philosophy emphasizes new and infill construction that is compatible with the historic structures that give Downtown its unique identity.</li> <li>• <i>Policy LU-5</i>: Provide incentives for infill development throughout Downtown, and with an emphasis on the key opportunity sites identified in this plan.</li> <li>• <i>Policy LU-6</i>: Place a strong emphasis on supporting, preserving, and expanding the Raincross District as a major center for culture, learning, and the arts.</li> </ul>	<p>The Project is not compatible with the mass, scale, size, and proportions of the historic structures in the vicinity. Rather than supporting the District as a major center for culture and the arts, the Project detracts from it by not respecting its rich store of historic buildings. The Project does not serve the needs of residents or create round-the-clock vibrancy. The Project has a 1-foot setback instead of the 15-foot setback required and appears to provide none of the pedestrian amenities or features called for on Mission Inn Avenue,</p>

<sup>3</sup> In the brochure entitled “Historic Districts of Riverside,” the First Congregational Church is identified as a “major focal point” of the Mission Inn Historic District.

<sup>4</sup> (See, e.g., *Protect Niles Canyon v. City of Fremont* (2018) 25 Cal.App.5th 1129 [EIR required due to project’s visual impact on a surrounding official historical district].)

<ul style="list-style-type: none"> <li>• <i>Policy LU-10</i>: Encourage the establishment of a vibrant mix of uses that will serve the needs of both residents and visitors and will help create a vibrant daytime, evening, and weekend environment.</li> <li>• <i>Policy LU-11</i>: Promote the expansion of the convention center and related hotel uses to support increased convention and tourist activity.</li> <li>• <i>Policy LU-12</i>: Maintain a continuity of pedestrian activity through active retail and restaurant ground level uses along Mission Inn Avenue, Main Street and University Avenue. (<i>Accord, Policy C-1-11</i> [Provide for pedestrian circulation at ground level]; and DSP, p. 19-11 [designating Mission Inn Avenue as a pedestrian oriented street and calling for provision of benches, street furniture, shade trees and related amenities].)</li> </ul>	<p>a designated pedestrian-oriented street. The Project site and other nearby parcels are designated for mixed residential/commercial development, not a hotel. Instead, the Raincross Square area is envisioned for such development. See discussion below.</p>
<ul style="list-style-type: none"> <li>• <u>Goal UD-1</u>: Strengthen the identity and character of Downtown using the existing historic and architectural urban character of the community, while allowing for new structures that are architecturally compatible with, and complementary to, the existing architectural and historic fabric.</li> <li>• <i>Policy UD-1-1</i>: Through design review, ensure that new development enhances the character of the Downtown Districts by requiring design qualities and elements that contribute to an active pedestrian environment, where appropriate, and ensuring that architectural elements are compatible and in scale with the existing historic structures in the Downtown.</li> <li>• <i>Policy UD-1.6</i>: Establish development standards to preserve the view of historic buildings along Mission Inn Avenue from the vantage point of the Riverside 91 Freeway.</li> </ul>	<p>As noted in the reports from the expert historic preservation consultants, the Project is not architecturally compatible in scale with or complementary to the existing architectural and historic fabric. With essentially a zero lot line, the Project does not contribute to an active pedestrian network. As explained above, the Project may significantly alter the important viewshed of historic buildings along Mission Inn Avenue from the 91 Freeway, including the bell tower on the First Congregational Church.</p>
<ul style="list-style-type: none"> <li>• <u>Goal HP-1</u>: Strengthen and enhance the historic character of Downtown Riverside, which is unique to the Inland Empire, through the preservation and maintenance of Downtown's historically significant sites and structures.</li> <li>• <i>Policy HP-1-4</i>: Through design review, encourage new development to be compatible</li> </ul>	<p>The Project may result in a substantial adverse change to the Historic Fire Station and several other historical resources. The Project is not compatible with adjacent historical structures in scale, massing, building materials, and general architectural treatment. See above.</p>

with adjacent historical structures in scale, massing, building materials, and general architectural treatment.	
<b>B. Raincross District<sup>5</sup></b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <u>Section 6.5 Development Standards for the Raincross District</u>: To ensure compatible development with the historic buildings in the Mission Inn Historic District, the maximum allowable height and maximum allowable density in this area is lower than for development in the remainder of the Raincross District.<sup>6</sup></li> <li>• <i>Section 6.5.1.B Maximum Floor Area Ratio Within the Mission Inn Historic District</i>: The maximum floor area ratio (“FAR”) shall be 3.0; FAR may be increased up to 4.5 with the approval of a Conditional Use Permit, provided the proposed use specifically support the purpose and intent of the Raincross District and is compatible with surrounding development and design.</li> <li>• <i>Section 6.5.3.B Maximum Height Within the Mission Inn Historic District</i>: 100 feet, provided that anything over 60 feet requires the approval of a Conditional Use Permit and must specifically support the purpose and intent of the Raincross District and be compatible with surrounding development and design.</li> <li>• <i>Section 6.5.5 Front Yard Setback</i>: For parcels that have frontage on Mission Inn Avenue between the 91 Freeway and Main Street, the minimum setback shall be 15 feet. The front</li> </ul>	<p>The Project greatly exceeds the height limit and also substantially exceeds the FAR limit. With essentially a zero lot line, it also fails to comply with the minimum setback requirement. Instead of carefully complying with the established development standards to ensure compatibility of development, the Project completely ignores them to achieve the room count desired.</p> <p>In approving a use permit, the Planning Commission made no findings as to the Project height and FAR limit, including the requisite finding that the Project supports the purpose and intent of the Raincross District and is compatible with surrounding development and design. There is no front yard setback with incorporation of hard and soft features, as specified. Even if it had made such findings, they would not be supported by substantial evidence.</p>

<sup>5</sup> The Downtown Specific Plan (“DSP”) describes the Raincross District as follows: “The Raincross District is the cultural, historic, and social center of both Riverside and the region beyond. The quality of Downtown Riverside’s historic buildings and the relationship between these buildings creates an historic urban fabric unparalleled in the region. The positive image and economic health of Riverside is strongly influenced by this historic character and the protection of that is an essential part of assuring Riverside’s economic health and growth into the future. . . . The center of the District is occupied by the Mission Inn Historic District, which contains Riverside’s most important historic buildings. In this sub-area the development standards have been carefully crafted to maintain a scale of development that is compatible with the well-established historic fabric of the district.” (DSP, Section 6-1; *accord*, Section 6.6.1 [“Historic and cultural resource sensitivity are the key concepts in this district. . . . New construction should be in scale and architecturally harmonious with nearby historic buildings.”].)

<sup>6</sup> (*Accord*, DSP Section 15.5 [“The historic architecture of the City is one of its most important resources and is maintained by the establishment and enforcement of guidelines for the treatment of historic buildings and structures in historic districts.”].)

yard setback should incorporate a combination of “soft” features, such as landscaping, water, etc. and “hard” features, such as pavers, ironwork fencing, etc. ( <i>Accord</i> , Section 6.6.2 [“For parcels with frontage on Mission Inn Avenue; architectural elements such as stairs or steps, and urban amenities such as benches, water foundations, and public art are encouraged.”].)	
<ul style="list-style-type: none"> <li>• <u>Section 6.6 Design Standards and Guidelines for the Raincross Districts</u></li> <li>• <u>Section 6.6.3 Architecture</u></li> <li>• <i>Style</i>: New buildings should be compatible with their historic neighbors in terms of massing, modulation, height, and setbacks.</li> <li>• <i>Scale</i>: (1) Buildings and improvements should be at a pedestrian scale. To maintain a sense of pedestrian scale, larger buildings should be broken into storefront bays about 25 feet wide. (2) The size and mass of a new building should blend with the surrounding district.</li> </ul>	<p>At 8-stories and over 200,000 square feet on a less than one acre lot, the Project is not compatible in terms of scale, massing, or height with its historic neighbors and is not designed at a pedestrian scale.</p> <p>The Project’s historical consultant cites the Stalder and Imperial Hardware buildings as examples of comparable projects. These projects are not comparable (see Snow Report) and were based on a report that contained a comprehensive analysis of various preservation alternatives. (DSP, p. 6-12 [citing the Donaldson report].) The DSP notes that similar studies should be done in connection with potential development of other sites containing historic buildings. (<i>Id.</i>) No such study was done here.</p>
<b>C. General Design Standards and Guidelines</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>
<ul style="list-style-type: none"> <li>• <u>Section 15.4 Architectural Design Standards</u></li> <li>• <i>Section 15.4.1 Massing, Form, and Scale (New structures, including Additions)</i>: (1) The size and mass of new structures, including additions, should be in relation to surrounding structures.</li> </ul>	The Project is inconsistent with these provisions. See above.
<ul style="list-style-type: none"> <li>• <u>Section 15.8.2 Building Mass, Scale and Form: Guidelines</u> (1) New structures should maintain the average scale of historic structures within the area.<sup>7</sup></li> </ul>	The Project is inconsistent with these provisions. See above.
<b>D. Parking Standards</b>	<b>Project is Inconsistent with Plan Objectives and Policies</b>

<sup>7</sup> (See also, DSP Section 15.7.5 [noting additions “should be compatible in size and scale to the original structure, although subordinate in massing” and should “use similar finish materials and fenestration patterns as the original structure.”].)

<p><u>Section 16.2.4 Parking Requirements (Raincross and Justice Center Districts)</u></p> <ul style="list-style-type: none"> <li>• Hotel: 1:1 guest room, ancillary uses at 50% of Specific Plan requirement</li> <li>• General Office: 1:250</li> <li>• Retail: 1:375</li> <li>• Restaurant: 1:150</li> </ul>	<p>The Project is deficient in parking by 82 parking spaces and does not comply with these provisions.</p>
<p><b>E. Implementation</b></p>	<p><b>Project is Inconsistent with Plan Objectives and Policies</b></p>
<ul style="list-style-type: none"> <li>• Target Raincross Square for expansion of hospitality uses, specifically a 100-150 room hotel. (Section 21.1.1; see also DSP, p. 2-17 [noting the “development of up to 120-150 rooms near the freeway should be considered by the City, with possible support for additional rooms if the Raincross Square is expanded.]])</li> <li>• Encourage expansion of the Convention Center and development of a third hotel (Table 21A)</li> <li>• Development concepts are intended to reinforce the identities of Land Use Districts, e.g., hospitality uses concentrated on the Raincross Square in the Raincross District. (DSP, pp. 21-23 [“The existing Raincross Square and nearby hotels represent an important asset that should be expanded. It is recommended that the two blocks located north of the Holiday Inn Select and Raincross Square be targeted for expansion of the convention center and development of a third hotel.”].)</li> <li>• Table 21D (Profile of Opportunity Sites): listing Sites 1 and 2 for hotel and convention center expansion and Site 9 (containing the fire station, YMCA building, and surface parking lot) for mixed-use development, comprised of retail, restaurant, residential or office components.</li> </ul>	<p>The DSP identifies Raincross Square for development of a hotel of up to 150 rooms in conjunction with expansion of the Convention Center. It does not identify the Project site for hotel uses, but rather for mixed-use commercial/residential development. Additional hotel rooms were only to be considered if the Raincross Square were to be expanded. That area has not yet been expanded to include an additional hotel. Thus, the Project is inconsistent with the Implementation goals and policies of the DSP.</p>