

MEMORANDUM

To: Los Angeles Department of City Planning
From: Lainie Herrera
Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)
Date: April 6, 2011
Attachment(s): KOA Memorandum

This memorandum provides a CEQA review of the proposed addition of approximately 7,500 square feet of medical clinic uses to the proposed Palmer Lorenzo Project (the “Project”) previously analyzed. The Applicant, G.H. Palmer Associates has proposed a modification to the Project to respond to community concerns, which would consist of adding a space for a medical clinic of approximately 7,500 square feet on the ground floor of the proposed Site A, at the northern portion of the 23rd Street frontage. This space would not reduce the number of residential units proposed on Site A (919 units) or the 34,000 square feet of proposed commercial uses on Site A. Although the proposed change is not anticipated to result in any new significant impacts or the increased severity of any previously identified significant impacts as they relate to CEQA, this memorandum has been prepared to evaluate potential impact areas.

PROJECT BACKGROUND AND CEQA

The City’s CEQA review of the Project commenced with the issuance of a Notice of Preparation on June 11, 2008, which was circulated for a 30-day review period ending on July 11, 2008. On November 19, 2009, the City released the Draft EIR for public comment. The comment period was 45 calendar days, ending on January 4, 2010. The lead agency received 76 written comments on the Draft EIR from public agencies, groups and individuals. Responses to all comments received between November 19, 2009 and January 4, 2010 were included in the Final EIR. The City issued a Notice of Completion and Availability of the Final EIR on August 25, 2010. A Supplemental CEQA Analysis of Reduced Density Proposal was also prepared to evaluate the potential impacts of the Applicant’s proposed reductions to the Project, discussed further below, which the City released to the public and the State Clearinghouse on December 27, 2010.

The Original Lorenzo Project

The EIR analyzed a project that would consist of two structures, a six-story building on the eastern side of Flower Street (Site A) and a 44-story building directly across from it, on the western side of Flower Street

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(Site B) (herein referred to as the “Original Lorenzo Project”). Under the Original Lorenzo Project, Site A would contain approximately 34,000 square feet of retail uses and 919 multi-family units; Site B would contain approximately 481 multi-family units. Parking for the Original Lorenzo Project would consist of approximately 3,204 spaces provided in three subterranean levels and one ground level located beneath Site A and five subterranean parking levels located beneath Site B.

The Original Lorenzo Project would provide a total of approximately 50,000 square feet of recreational amenities including a pool/spa area, gym, indoor basketball court, as well as amenities such as a lounge, library, a study room with internet access and bookshelves, computer stations, virtual gaming, and business center/conference room uses. Bicycle parking would also be provided.

The Reduced Lorenzo Project

In October 2010, the Applicant submitted a revised reduced project to reduce the proposed 44-story tower on Site B to a 12-story structure with a maximum height of approximately 125 feet. The reduced structure would include 132 dwelling units, which would result in a net reduction of 349 units across the Project site. Site A would be developed as proposed in the EIR, with a six-story building containing approximately 34,000 square feet of retail uses and 919 multi-family units. Parking would consist of approximately 2,447 spaces provided in three subterranean levels and one ground level located at Site A and four subterranean parking levels and one ground level located at Site B. The Project with these reductions is hereafter referred to as the “Reduced Lorenzo Project.”

The Reduced Lorenzo Project would provide a total of approximately 140,650 square feet of recreational amenities including open space, a pool/spa area, gym, indoor basketball court, as well as amenities such as a lounge, library, a study room with internet access and bookshelves, computer stations, virtual gaming, and business center/conference room uses. Bicycle parking would also be provided.

On December 27, 2010, the City released a Supplemental CEQA Analysis of Reduced Density Proposal, which analyzed the potential impacts from the Reduced Lorenzo Project. The document concluded that no new significant impacts would occur, and in fact impacts related to Aesthetics would be reduced under the Reduced Lorenzo Project to a less-than-significant level compared to the Original Lorenzo Project, which would have resulted in a significant and unavoidable Aesthetics impact due to the originally proposed height and massing on Site B.

REDUCED LORENZO PROJECT PLUS MEDICAL CLINIC

Based on discussions with community stakeholders, the Applicant has proposed the addition of a 7,500 square-foot medical clinic to the Reduced Lorenzo Project. As described above, the clinic would be located on 23rd Street, at the northern boundary of Site A. The clinic would be located on the ground

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floor, and would not result in the loss any proposed residential units or commercial space and would be primarily located in space previously allocated to the Reduced Lorenzo Project's parking garage. The Applicant has relocated all parking spaces from the location of the proposed medical clinic to other portions of the Site A parking garage. The Reduced Lorenzo Project with the addition of this medical clinic space is hereafter referred to as the "Reduced Lorenzo Project Plus Medical Clinic."

Because of the type of use proposed, the addition of a medical clinic to the Project as previously analyzed in the EIR (including the Supplemental CEQA Analysis of Reduced Density Proposal) would not result in any new significant environmental impacts, require a new mitigation measure, or result in a substantial increase in the severity of an environmental impact for the following categories:

- Air Quality (Greenhouse Gas Emissions)
- Aesthetics
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Population and Housing
- Public Services

However, addition of a medical clinic use may result in impacts on the environment related to the following topics, which are further analyzed below:

- Air Quality
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Traffic, Transportation, and Parking
- Utilities

Air Quality (Draft EIR § IV.C)

Addition of a medical clinic use to the Reduced Lorenzo Project would not change the construction assumptions contained in the EIR. The overall building size on Site A and construction schedule (duration, equipment mix) would be the same as analyzed in the EIR. For purposes of this analysis of the addition of 7,500 square feet of clinic space, construction traffic trips would be the same as or lower than that analyzed in the EIR, due to the reduction in development on Site B under the Reduced Lorenzo Project as analyzed in the Supplemental CEQA Analysis of Reduced Density Proposal, and as with the Original and Reduced Lorenzo Projects, would likely exceed the SCQAMD threshold for NO_x emissions associated with those trips. Furthermore, the addition of a clinic use would not change the types of construction equipment analyzed in the EIR, nor would a change in construction intensity or duration

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occur. Therefore, the EIR analysis for construction air quality would not change based on the addition of clinic space to the Reduced Lorenzo Project.

Operational air quality emissions would be reduced compared to the emissions analyzed in the EIR because of the previously discussed reduction of the number of residential units on Site B. The addition of clinic uses to Site A would result in an overall net trip generation for the Reduced Lorenzo Project Plus Medical Clinic of -43 trips during the AM Peak Hour and 21 trips during the PM Peak Hour (see KOA Supplemental Traffic Analysis (March 7, 2011), attached as Appendix A). This net trip generation is significantly lower than the trip generation analyzed for the Original Lorenzo Project in the EIR, and therefore addition of a clinic space to the Project (when combined with the reduced project size on Site B), would result in a decrease of anticipated air quality emissions compared to those analyzed in the EIR. Table 1 presents estimated emissions resulting from operation of the proposed Reduced Lorenzo Project Plus Medical Clinic in year 2013. Year 2013 was used to analyze operational emissions generated by the Reduced Lorenzo Project Plus Medical Clinic consistent with the Draft EIR, which assumed the year 2013 as the first year of operation for the Original Lorenzo Project.

Table 1						
Reduced Lorenzo Project Plus Medical Clinic						
Estimated Future (2013) Daily Operational Emissions						
(lbs/day)						
Emissions Source	VOC	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Summer¹						
Water and Space Heating, and Cooking Appliances	0.82	10.68	4.70	0.00	0.02	0.02
Landscape Maintenance Equipment	0.49	0.08	6.18	0.00	0.02	0.02
Consumer Products	53.92	--	--	--	--	--
Architectural Coatings	2.04	--	--	--	--	--
Mobile (Vehicle) Sources	27.83	20.73	264.60	0.32	2.68	1.64
Total	85.10	31.49	275.48	0.32	2.72	1.68
<i>Pollutant Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	Yes	No	No	No	No	No
Winter²						
Water and Space Heating, and Cooking Appliances	0.82	10.68	4.70	0.00	0.02	0.02
Consumer Products	53.92	--	--	--	--	--
Architectural Coatings	2.04	--	--	--	--	--
Motor Vehicles	27.20	25.57	253.64	0.26	2.68	1.64
Total	83.98	36.25	258.34	0.26	2.70	1.66
<i>Pollutant Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	Yes	No	No	No	No	No

Source: URBEMIS 2007 Version 9.2.4. See Appendix A for complete results

¹ "Summer Emissions" are representative of the conditions that may occur during the ozone season (May 1 to October 31).

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² “Winter Emissions” are representative of the conditions that may occur during the balance of the year (November 1 to April 30).

As shown in Table 1, the Reduced Lorenzo Project Plus Medical Clinic would not exceed SCAQMD operational thresholds for NO_x, CO, SO_x, PM₁₀, and PM_{2.5} in summer or winter seasons. However, the Reduced Lorenzo Project Plus Medical Clinic would exceed the 55 lbs/day SCAQMD operational threshold for VOC in both the summer and winter seasons, which is the same as the impact identified in the Draft EIR for the Original Lorenzo Project. Therefore, impacts related to air quality resulting from the Reduced Lorenzo Project Plus Medical Clinic scenario would be the same as identified in the Draft EIR.

Table 2 compares estimated operational emissions of the Reduced Lorenzo Project Plus Medical Clinic and the Original Lorenzo Project, in year 2013.

Table 2 Comparison of the Reduced Lorenzo Project Plus Medical Clinic to the Original Lorenzo Project Estimated Future (2013) Daily Operational Emissions (lbs/day)						
	VOC	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Summer¹						
Reduced Lorenzo Project Plus Medical Clinic	85.10	31.49	275.48	0.32	2.72	1.68
Original Lorenzo Project	108.79	38.10	317.48	0.37	3.17	1.96
Difference	(23.69)	(6.61)	(42.00)	(0.05)	(0.45)	(0.28)
Winter²						
Reduced Lorenzo Project Plus Medical Clinic	83.98	36.25	258.34	0.26	2.7	1.66
Original Lorenzo Project	107.7	43.67	300.78	0.29	3.16	1.92
Difference	(23.72)	(7.42)	(42.44)	(0.03)	(0.46)	(0.26)

Source: URBEMIS 2007 Version 9.2.4. See Appendix A for complete results

¹ “Summer Emissions” are representative of the conditions that may occur during the ozone season (May 1 to October 31).

² “Winter Emissions” are representative of the conditions that may occur during the balance of the year (November 1 to April 30).

Operation of the proposed Reduced Lorenzo Project Plus Medical Clinic scenario would result in a reduction of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions compared to the Original Lorenzo Project for both summer and winter seasons. As the Reduced Lorenzo Project Plus Medical Clinic would result in an approximate 10 to 22 percent reduction in criteria air pollutant emissions estimated for the Original Lorenzo Project analyzed in the Draft EIR, the Reduced Lorenzo Project Plus Medical Clinic would not increase the severity of air quality operational impacts as previously identified in the Draft EIR.

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Assessment of the Proposed Reduced Lorenzo Project Plus Medical Clinic Assuming Existing Conditions (Year 2008)

In response to a recent court decision *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* (6th App. Dist., December 16, 2010), Dudek has further evaluated the Reduced Lorenzo Project Plus Medical Clinic scenario's air quality impacts assuming project operation under existing conditions, which was assumed to be year 2008 in the Draft EIR analysis. Dudek's supplemental evaluation is based on the analyses conducted originally by Christopher A. Joseph and Associates (CAJA) and reported in the Original Lorenzo Project Draft EIR (November 2009). Dudek utilized the same methodology presented in the Draft EIR air quality impact analysis; detailed model assumptions are included in Appendix B.

As described above, construction of the Reduced Lorenzo Project Plus Medical Clinic scenario would be reduced compared to the Original Lorenzo Project as a result of a reduction in development size. Construction of the Reduced Lorenzo Project Plus Medical Clinic in year 2008 would entail the same approximate phase duration, equipment, and additional assumptions as would the Original Lorenzo Project analyzed in the Draft EIR, which assumes project construction starting in the year 2010 and reaching completion in the year 2013. Advances in equipment technology over time would result in a reduction of equipment exhaust air pollutant emissions; however, the use of equipment with model years 2008 and before, as compared to model years 2010 and before, would not result in a substantial increase in construction air pollutant emissions. Thus, impacts related to air quality resulting from construction of the Reduced Lorenzo Project Plus Medical Clinic under existing conditions (year 2008) would be the same as identified in the Draft EIR.

The URBEMIS2007 Version 9.2.4 modeling software was utilized to estimate emissions associated with Project operation under existing conditions in year 2008. Vehicle fleet mix was revised to match vehicle fleet assumptions in the Draft EIR analysis. Average daily trips (ADT) rates for the proposed land uses were revised consistent with the methodology used in the Draft EIR analysis; trip reductions calculated in the Reduced Lorenzo Project Plus Medical Clinic Traffic Analysis (KOA, March 7, 2011) were incorporated into the ADT for each land use, if appropriate, to represent the same total Project-related trips as presented by the traffic study.

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Table 3 Reduced Lorenzo Project Plus Medical Clinic Estimated Existing (2008) Daily Operational Emissions (lbs/day)						
Emissions Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer¹						
Water and Space Heating, and Cooking Appliances	0.82	10.68	4.70	0.00	0.02	0.02
Landscape Maintenance Equipment	0.55	0.07	6.65	0.00	0.02	0.02
Consumer Products	53.92	--	--	--	--	--
Architectural Coatings	3.13	--	--	--	--	--
Mobile (Vehicle) Sources	35.60	29.38	358.38	0.32	2.60	13.26
Total	94.02	40.13	369.73	0.32	2.64	13.3
<i>Pollutant Threshold</i>	55	55	550	150	150	55
Threshold Exceeded?	Yes	No	No	No	No	No
Winter²						
Water and Space Heating, and Cooking Appliances	0.82	10.68	4.70	0.00	0.02	0.02
Consumer Products	53.92	--	--	--	--	--
Architectural Coatings	3.13	--	--	--	--	--
Motor Vehicles	34.98	36.37	340.85	0.26	2.60	1.57
Total	92.85	47.05	345.55	0.26	2.62	1.59
<i>Pollutant Threshold</i>	55	55	550	150	150	55
Threshold Exceeded?	Yes	No	No	No	No	No

Source: URBEMIS 2007 Version 9.2.4. See Appendix A for complete results

¹ "Summer Emissions" are representative of the conditions that may occur during the ozone season (May 1 to October 31).

² "Winter Emissions" are representative of the conditions that may occur during the balance of the year (November 1 to April 30).

As presented in Table 3, operation of the Reduced Lorenzo Project Plus Medical Clinic scenario in year 2008 would not exceed SCAQMD operational thresholds for NO_x, CO, SO_x, PM₁₀, and PM_{2.5} in summer or winter seasons; the Project would, however, exceed the threshold for VOC in summer and winter seasons. The Original Lorenzo Project (operational year 2013) analyzed in the Draft EIR would also exceed the SCAQMD operational threshold for VOC, but would not exceed thresholds for all other criteria air pollutants. As such, impacts related to air quality resulting from operation of the Reduced Lorenzo Project Plus Medical Clinic under existing conditions would be the same as identified in the Draft EIR.

Level of Significance After Mitigation

All construction and operational air quality mitigation measures set forth in the EIR would be required and implemented under the Reduced Lorenzo Project Plus Medical Clinic scenario.

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Implementation of Mitigation Measure C-14 in the EIR would slightly reduce regional air quality impacts associated with NO_x emissions during Project construction, however, emissions would continue to exceed the SCQAMD threshold and would result in a significant and unavoidable impact. The Reduced Lorenzo Project Plus Medical Clinic scenario would not change the EIR's analysis of operational and cumulative VOC emissions, which would remain significant and unavoidable.

All other potential project-level and cumulative air quality impacts evaluated in the EIR would remain less than significant after mitigation.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic space to the Reduced Lorenzo Project would not result in any new significant air quality impacts or result in a substantial increase in the severity of those impacts as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Hazards and Hazardous Materials (Draft EIR § IV.F)

The addition of 7,500 square feet of medical clinic space to the Reduced Lorenzo Project would introduce a medical clinic land use to the Project site, which would be consistent with the site's underlying zoning. In addition to hazardous materials commonly used in the operation of residential and commercial uses such as cleaning and maintenance products, the medical clinic use would be expected to use hazardous and flammable materials such as sodium hydroxide, chlorine bleach, gases, acids, fuels for mechanical equipment, and cleaning solutions. Hazardous wastes associated with medical uses typically include biohazardous wastes and biomedical wastes, all of which are regulated by City, State, and federal regulations. The City of Los Angeles Municipal Code (LAMC), Section 57.08, requires that all businesses that handle hazardous materials in excess of 500 pounds or 55 gallons be required to file a Hazardous Materials Release Response Plan (HMRRP) and Inventory Program and to prepare and submit a Business Plan to the Los Angeles Fire Department (LAFD). The Project would also be required to comply with applicable federal OSHA and Cal OSHA requirements. Because the Project would be required by law to comply with all applicable regulations related to medical uses and potential hazards, potential for upset would be regulated and therefore impacts would be less than significant.

Level of Significance After Mitigation

The hazards and hazardous materials mitigation measures set forth in the EIR would be required and implemented under the Reduced Project Plus Medical Clinic scenario. The addition of medical clinic uses to the Reduced Lorenzo Project would require compliance with several City, State, and federal regulations related to medical uses and waste. However, compliance with such regulations is required by law and not considered mitigation under CEQA. With implementation of Mitigation Measures F-1

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through F-6 as identified in the Draft EIR, impacts with respect to hazards and hazardous materials would be less than significant. Consistent with the EIR's analysis, potential cumulative impacts pertaining to hazards and hazardous materials would be less than significant.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant hazards or hazardous materials impacts or result in a substantial increase in the severity of those effects as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Land Use Planning (Draft EIR § IV.H)

Addition of medical clinic space to the Reduced Lorenzo Project would be allowed by-right in the C2 zone and would not require any additional discretionary entitlement requests. Although the proposed FAR on Site A for the Reduced Lorenzo Project (approximately 3.22:1) would increase slightly with the addition of 7,500 square feet of medical clinic space (to approximately 3.24:1), this would be well under the requested 6:1 FAR for Site A. The EIR and the Supplemental CEQA Analysis of Reduced Density Proposal concluded that the Reduced Lorenzo Project would be consistent with a large majority of the applicable plans, goals, objectives and policies of the related plans, and that potential impacts to land use would be less than significant. Addition of a medical clinic use to the site would promote additional City goals, objectives, and policies such as: promoting safety and health within neighborhoods; providing sufficient services and amenities to support the planned population while preserving the neighborhood for those currently there; promoting a coordinated integration of development around transit stations to improve services, access and economic vitality of the community; providing mixed-use developments with commercial development and structures that integrate commercial, housing, and/or public service uses; and locating a mix of development types near transit hubs and stations. As discussed in the EIR, the Project would also fulfill goals, objectives, and policies by locating new housing in a manner that reduces vehicular trips and makes it accessible to services and facilities, and by promoting sustainable neighborhoods that have mixed-income housing, jobs, amenities, services and transit. Impacts under the Reduced Lorenzo Project Plus Medical Clinic scenario would remain less than significant.

Level of Significance After Mitigation

The addition of clinic space to the Reduced Lorenzo Project would make the Project more consistent with the applicable goals, objectives, and policies of the related plans described in the Draft EIR and the Supplemental CEQA Analysis of Reduced Density Proposal. Medical clinic uses are also allowed on the Project site by-right and would not require additional discretionary actions or approvals. Therefore, impacts related to land use planning would be less than significant and no mitigation is required.

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Consistent with the analysis in the EIR, potential cumulative impacts to land use planning would remain less than significant.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the addition of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant land use impacts or result in a substantial increase in the severity of those impacts as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Noise (Draft EIR § IV.I)

Addition of a medical clinic use to the Reduced Lorenzo Project would not change the construction assumptions or increase the overall floor area analyzed in the EIR. For purposes of this analysis of the addition of 7,500 square feet of clinic space, construction equipment and duration would be the same as or lower than that analyzed in the EIR, and would not change the overall impact analysis. Furthermore, the addition of clinic uses to Site A, when combined with the reduced project size on Site B under the Reduced Lorenzo Project, would result in an overall Project net trip generation of -43 trips during the AM Peak Hour and 21 trips during the PM Peak Hour (see KOA Supplemental Traffic Analysis (March 7, 2011), attached as Appendix A). This net trip generation is significantly lower than the trip generation analyzed in the EIR for the Original Lorenzo Project, and therefore addition of a clinic space (when combined with the reduced project size on Site B under the Reduced Lorenzo Project) would result in a decrease of traffic trips to and from the site, and therefore a reduction in traffic-related noise compared to the levels analyzed in the EIR.

Therefore, the EIR analysis of construction and operational noise would not change based on the addition of clinic space to the Reduced Lorenzo Project.

Assessment of the Proposed Reduced Lorenzo Project Plus Medical Clinic Assuming Existing Conditions (Year 2008)

Construction of the Reduced Lorenzo Project Plus Medical Clinic scenario would be reduced compared to the Original Lorenzo Project as a result of a reduction in development size. Construction of the Reduced Lorenzo Project Plus Medical Clinic under existing conditions (year 2008) would entail the same approximate phase duration, equipment, and additional assumptions as would the Original Lorenzo Project analyzed in the Draft EIR. Thus, noise impacts resulting from construction of the Reduced Lorenzo Project Plus Medical Clinic under existing conditions (year 2008) would be the same as identified in the Draft EIR.

As discussed below, the March 7, 2011 Supplemental Traffic Analysis prepared by KOA analyzes the potential impacts of the Reduced Lorenzo Project Plus Medical Clinic scenario under existing conditions

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in response to the recent case *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* (6th App. Dist., December 16, 2010). The KOA analysis shows that the Reduced Lorenzo Project Plus Medical Clinic would result in substantially fewer traffic trips than the Original Lorenzo Project analyzed in the EIR and would not result in any significant impacts under existing conditions. The reduction in traffic trips associated with the Reduced Lorenzo Project Plus Medical Clinic would therefore not increase noise when analyzed against existing conditions. As such, impacts related to noise resulting from operations of the Reduced Lorenzo Project Plus Medical Clinic under existing conditions would remain less than significant.

Level of Significance After Mitigation

All construction and operational noise mitigation measures set forth in the EIR would be required and implemented under the Reduced Project Plus Medical Clinic scenario.

While Mitigation Measures I-1 through I-10 would reduce construction-related noise impacts to the greatest extent feasible, project-level construction noise impacts and cumulative construction noise impacts would remain significant and unavoidable. Implementation of Mitigation Measures I-11 and I-3 would continue to reduce vibration impacts associated with the proposed Project to less than significant levels. Implementation of Mitigation Measures I-13 to I-15 would continue to ensure that the Project's operational noise impacts would be less than significant. No new mitigation measures are proposed or necessary.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic space to the Reduced Lorenzo Project would not result in any new significant noise impacts or result in a substantial increase in the severity of those impacts as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Traffic, Transportation, and Parking (Draft EIR § IV.L)

The addition of medical clinic space would change the number of daily and peak hour traffic trips generated by the Reduced Lorenzo Project. The Draft EIR concluded that with the incorporation of required mitigation measures, potential traffic and transportation impacts would be reduced to less than significant levels. The Final EIR included (see Section III, Responses to Comments) an updated traffic analysis to address public comments that raised potential concerns about the Draft EIR's traffic analysis, which also concluded that no new significant impacts beyond what was identified in the Draft EIR would occur. The Supplemental CEQA Analysis of Reduced Density Proposal for the Reduced Lorenzo Project concluded that the reduction of residential units on Site B from 481 units to 132 units would generate fewer traffic trips than the Original Lorenzo Project. KOA provided a revised trip generation table, dated

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November 9, 2010, which demonstrated that no new significant impacts beyond what was identified in the EIR would occur based on the Reduced Lorenzo Project.

KOA has prepared a Supplemental Traffic Analysis (dated March 7, 2011 and attached as Appendix A) analyzing the addition of the proposed 7,500 square foot medical clinic to the Reduced Lorenzo Project, which shows that addition of the clinic uses would not result in any significant impacts. Compared to the Original Lorenzo Project analyzed in the EIR, this project scenario would reduce one potentially significant impact at Grand Avenue and 23rd Street during the a.m. peak hour, because of the reduction in residential units associated with this scenario. Thus, impacts under the Reduced Lorenzo Project Plus Medical Clinic scenario would remain less than significant.

Furthermore, the Reduced Lorenzo Project Plus Medical Clinic scenario would continue to meet parking requirements as set forth by the LAMC. The Reduced Lorenzo Project provided a total of 2,447 parking spaces, with 2,255 parking spaces on Site A and 192 parking spaces on Site B, which satisfied LAMC requirements. A 7,500 square foot medical clinic would require 38 parking spaces for that use (1 space per 200 square feet). However, based on LADOT guidelines and the LAMC, a ten percent parking reduction would be applied to the required number of parking spaces for the medical clinic (as was applied to the required number of parking spaces for the Project's other commercial uses in the EIR) due to the Project's proximity to the Exposition Line light rail station. This would reduce the parking requirement for the medical clinic by approximately 3 parking spaces, resulting in a total requirement of approximately 35 parking spaces. The Project would accommodate the additional 35 parking spaces on Site A while accommodating all other LAMC requirements. Thus, under the Reduced Lorenzo Project Plus Medical Clinic scenario, the Project would provide approximately 2,290 parking spaces on Site A, and a total of approximately 2,482 parking spaces across both Sites A and B.

Assessment of the Proposed Reduced Lorenzo Project Plus Medical Clinic Assuming Existing Conditions (Year 2008)

The March 7, 2011 Supplemental Traffic Analysis prepared by KOA (see Appendix A) also analyzes the potential impacts of the Reduced Lorenzo Project Plus Medical Clinic scenario under existing conditions in response to the recent case *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* (6th App. Dist., December 16, 2010). While this court decision was issued after publication of both the Draft and Final EIR, this analysis was provided for informational purposes and measures potential traffic impacts on the existing environment as provided for in the aforementioned case.

As shown in the KOA analysis, the Reduced Lorenzo Project would not result in any significant impacts under existing conditions. In addition, the analysis shows that the Reduced Lorenzo Project Plus Medical Clinic scenario would not result in any significant impacts under existing conditions. Therefore, under

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either scenario, the Project would not result in any new and/or different residual significant impacts at the analyzed intersections under the *Sunnyvale* analysis.

Level of Significance After Mitigation

The Reduced Lorenzo Project Plus Medical Clinic scenario would have a less-than-significant impact on traffic and transportation. However, as required in the Draft EIR, Mitigation Measures L-1 through L-4 would further reduce potential impacts. These mitigation measures shall also be required and implemented under the Reduced Lorenzo Project Plus Medical Clinic scenario, and impacts would remain less than significant. Parking impacts for the Reduced Lorenzo Project Plus Medical Clinic scenario would remain less than significant.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant traffic, transportation, and parking impacts or result in a substantial increase in the severity of those effects as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Utilities – Sewer (Draft EIR § IV.M.1)

The addition of 7,500 square feet of medical clinic uses could result in an increased generation of wastewater by the Reduced Lorenzo Project. As shown in Table 4, below, the medical clinic uses would generate approximately 1,875 gallons of wastewater per day. However, as previously analyzed in the Supplemental CEQA Analysis of Reduced Density Proposal, the reduction of residential units proposed for Site B would reduce wastewater generation across the Project site compared to the Original Lorenzo Project analyzed in the EIR. As shown in Table 4, even after addition of medical clinic uses, overall wastewater generation would be lower under the Reduced Lorenzo Project Plus Medical Clinic scenario than analyzed in the EIR. Therefore, the Draft EIR's analysis for wastewater would not change based on the revised Reduced Lorenzo Project Plus Medical Clinic scenario. The Reduced Lorenzo Project Plus Medical Clinic scenario would be required to implement the same mitigation measure as required by the EIR to reduce potential impacts to wastewater conveyance infrastructure to less than significant levels. All other wastewater impacts would remain less than significant consistent with the analysis in the EIR.

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Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

**Table 4
Estimated Wastewater Generation**

Land Use	Size	Generation Rate	Total Wastewater Generated (Gallons/Day)
One Bedroom Residential Units	230 du	120 gallons/unit/day	27,600
Two Bedroom Residential Units	888 du	160 gallons/unit/day	142,080
Three Bedroom Residential Units	282 du	200 gallons/unit/day	56,400
Restaurant	6,000 sf	300 gallons/1000 sf/day	1,800
Retail/Commercial	28,000 sf	80 gallons/1000 sf/day	2,240
Original Lorenzo Project Total			230,120
Existing Uses Total			0
Original Lorenzo Project Net Increase in Water Consumption			230,120
Less Reduction of 349 Residential Units on Site B under Reduced Lorenzo Project			(55,840)
Reduced Lorenzo Project Net Increase in Water Consumption			174,280
Medical Clinic	7,500 sf	250 gallons/1000 sf/day	1,875
Medical Clinic Total			1,875
Reduced Lorenzo Project Total			174,280
Plus Medical Clinic			1,875
Reduced Lorenzo Project Plus Medical Clinic Net Increase in Water Consumption			176,155
<i>sf = square feet</i>			
<i>Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002.</i>			

Level of Significance After Mitigation

Mitigation Measure M-1 set forth in the Draft EIR will also be required and implemented under the Reduced Lorenzo Project Plus Medical Clinic scenario. With implementation of Mitigation Measure M-1, impacts on wastewater conveyance infrastructure and wastewater treatment facilities would remain less than significant. Consistent with the analysis in the EIR, the Reduced Lorenzo Project Plus Medical Clinic's and the related projects' potential cumulative impacts to wastewater treatment capacity and wastewater treatment facilities would be less than significant.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic uses would not result in any new significant wastewater impacts or result in a substantial increase in the severity of those effects as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

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Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

Utilities – Water (Draft EIR § IV.M.2.)

The addition of 7,500 square feet of medical clinic uses could result in an increased demand for water by the Reduced Lorenzo Project. As shown in Table 5, below, the medical clinic uses would demand approximately 1,875 gallons of water per day. However, as previously analyzed in the Supplemental CEQA Analysis of Reduced Density Proposal, the reduction of residential units proposed for Site B under the Reduced Lorenzo Project would reduce water demand across the Project site compared to the rate analyzed in the EIR for the Original Lorenzo Project. As shown in Table 5, even after addition of medical clinic uses, overall water demand would be lower under the Reduced Lorenzo Project Plus Medical Clinic scenario than analyzed in the EIR. Therefore, the Draft EIR's analysis for water would not change based on the Reduced Lorenzo Project Plus Medical Clinic scenario.

Because the Reduced Lorenzo Project Plus Medical Clinic scenario would consume less water than the Original Lorenzo Project analyzed in the Draft EIR, the Draft EIR's analysis of water infrastructure, water treatment, fire flow and cumulative impacts would not change for the Reduced Lorenzo Project Plus Medical Clinic scenario. The Project would be required to implement the same mitigation measures as required by the EIR to reduce potential impacts to water infrastructure and fire flow to less than significant levels. All other water impacts would remain less than significant consistent with the analysis in the EIR.

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Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

**Table 5
Estimated Water Consumption**

Land Use	Size	Generation Rate	Total Wastewater Generated (Gallons/Day)
One Bedroom Residential Units	230 du	120 gallons/unit/day	27,600
Two Bedroom Residential Units	888 du	160 gallons/unit/day	142,080
Three Bedroom Residential Units	282 du	200 gallons/unit/day	56,400
Residential Total			226,080
Restaurant: Full Service Indoor Seat	400 seat	30 gallons/seat/day	12,000
Restaurant: Fast Food Outdoor Seat	50 seat	12 gallons/seat/day	600
Retail/Commercial	23,990 sf	80 gallons/1000 sf/day	1,919
Retail/Restaurant Total			14,519
Office, Leasing	13,961 sf	150 gallons/1000 sf/day	2,094
Library/Study	11,843 sf	80 gallons/1000 sf/day	947
Health Club	33,642 sf	800 gallons/1000 sf/day	26,914
Gymnasium (Basketball Courts)	2,814 sf	250 gallons/1000 sf/day	704
Theater	40 seat	4 gallons/seat/day	160
Residential Common Total			30,819
Landscaping Total			4,749
Original Lorenzo Project Total			276,167
Existing Uses Total			(6,860)
Additional Conservation			(64,074)
Original Lorenzo Project Net Increase in Water Consumption			205,233
Less Reduction of 349 Residential Units on Site B under Reduced Lorenzo Project			(55,840)
Reduced Lorenzo Project Net Increase in Water Consumption			149,393
Medical Clinic	7,500 sf	250 gallons/1000 sf/day	1,875
Medical Clinic Total			1,875
Reduced Lorenzo Project Total			149,393
Plus Medical Clinic			1,875
Reduced Lorenzo Project Plus Medical Clinic Net Increase in Water Consumption			151,268
<i>sf = square feet</i>			
<i>Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002.</i>			

Level of Significance After Mitigation

Mitigation Measures M-2 through M-14 set forth in the Draft EIR will also be required and implemented under the Reduced Lorenzo Project Plus Medical Clinic scenario. With implementation of these

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Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

mitigation measures, impacts on water supply, conveyance infrastructure, and fire flow would remain less than significant. Consistent with the analysis in the EIR, the Reduced Lorenzo Project Plus Medical Clinic's and the related projects' potential cumulative impacts to water would also be less than significant.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant water impacts or result in a substantial increase in the severity of those effects as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Utilities – Solid Waste (Draft EIR § IV.M.3)

The addition of 7,500 square feet of medical clinic uses could result in an increased generation of solid waste by the Reduced Lorenzo Project. As previously analyzed in the Supplemental CEQA Analysis of Reduced Density Proposal, the reduction of residential units proposed for Site B would still generate construction waste that is similar to the Original Lorenzo Project analyzed in the EIR. Construction waste generated by the Reduced Lorenzo Project Plus Medical Clinic scenario also would be similar to the Original Lorenzo Project analyzed in the EIR since the same amount of construction would occur. Therefore, the EIR analysis for construction solid waste would not change based on the Reduced Lorenzo Project Plus Medical Clinic scenario and potential impacts would remain less than significant. Implementation of Mitigation Measures M-15 and M-16 set forth in the MMRP of the Final EIR would further ensure recycling of demolition and construction related solid waste.

As shown in Table 6, below, operation of the medical clinic uses would generate approximately 525 pounds of solid waste per day. However, as previously analyzed in the Supplemental CEQA Analysis of Reduced Density Proposal, the reduction of residential units proposed for Site B under the Reduced Lorenzo Project would reduce solid waste generation across the Project site compared to the rate analyzed in the EIR for the Original Lorenzo Project. As shown in Table 6, even after addition of medical clinic uses, overall solid waste generation would be lower under the Reduced Lorenzo Project Plus Medical Clinic scenario than analyzed in the EIR. Therefore, the Draft EIR's analysis for solid waste would not change based on the Reduced Lorenzo Project Plus Medical Clinic scenario.

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Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

Table 6
Estimated Solid Waste Generation

Land Use	Size	Generation Rate	Total (pounds/day)
Multi-family Residential Units	1,400 units	4 pounds/unit/day	5,600
Retail/Commercial	76 employees ^a	10.53 pounds/employee/day	800
Original Lorenzo Project Total			6,400
Existing Uses Total			0
Original Lorenzo Project Net Increase in Solid Waste Generation			6,400
Less Reduction of 349 Residential Units on Site B under Reduced Lorenzo Project			(1,396)
Reduced Lorenzo Project Net Increase in Solid Waste Generation			5,004
Medical Clinic	7,500 sf	70 pounds / 1,000 sf / day	525
Medical Clinic Total			525
Reduced Lorenzo Project Total			5,004
Plus Medical Clinic			525
Reduced Lorenzo Project Plus Medical Clinic Net Increase in Solid Waste Generation			5,529
<i>Source: City of Los Angeles Bureau of Sanitation, "Solid Waste Generation," 1981.</i>			
<i>a: 2006 City of Los Angeles CEQA Thresholds Guide</i>			

Level of Significance After Mitigation

Mitigation Measures M-15 through M-17 set forth in the Draft EIR will also be required and implemented under the Reduced Lorenzo Project Plus Medical Clinic scenario. With implementation of these mitigation measures, impacts on solid waste services would remain less than significant. Consistent with the analysis in the EIR, the Reduced Lorenzo Project Plus Medical Clinic's and the related projects' potential cumulative impacts to solid waste would also be less than significant.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant solid waste impacts or result in a substantial increase in the severity of those effects as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Utilities – Electricity (Draft EIR § IV.M.4)

The addition of 7,500 square feet of medical clinic uses could result in an increased demand for electricity by the Reduced Lorenzo Project. As shown in Table 7, below, the medical clinic uses would consume approximately 446 KW-Hours of electricity per day. However, as previously analyzed in the

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Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

Supplemental CEQA Analysis of Reduced Density Proposal, the reduction of residential units proposed for Site B under the Reduced Lorenzo Project would reduce electricity demand across the Project site compared to the rate analyzed in the EIR for the Original Lorenzo Project. As shown in Table 7, even after addition of medical clinic uses, overall electricity demand would be lower under the Reduced Lorenzo Project Plus Medical Clinic scenario than analyzed in the EIR. Therefore, the Draft EIR's analysis for electricity demand would not change based on the Reduced Lorenzo Project Plus Medical Clinic scenario.

Table 7
Estimated Electricity Consumption

Land Use	Size	Consumption Rate	Total (KW-Hours/day)
Residential	1,400 units	15.42 KW-Hours/unit/day	21,588
Restaurant	6,000 sf	0.13 KW-Hours/sf/day	780
Retail	28,000 sf	0.037 KW-Hours/sf/day	1,036
Original Lorenzo Project Total			23,404
Existing Uses Total			0
Original Lorenzo Project Net Increase in Electricity Consumption			23,404
Less Reduction of 349 Residential Units on Site B under Reduced Lorenzo Project			(5,382)
Reduced Lorenzo Project Net Increase in Electricity Consumption			18,022
Medical Clinic	7,500 sf	0.059 KW-Hours / sf / day	446
Medical Clinic Total			446
Reduced Lorenzo Project Total Plus Medical Clinic			18,022 446
Reduced Lorenzo Project Plus Medical Clinic Net Increase in Electricity Consumption			18,468
<i>Source: SCAQMD, CEQA Air Quality Handbook, Table A9-11-A, 1993.</i>			

Level of Significance After Mitigation

Mitigation Measures M-18 through M-24 set forth in the Draft EIR will also be required and implemented under the Reduced Lorenzo Project Plus Medical Clinic scenario. With implementation of these mitigation measures, impacts on electricity supply and delivery would remain less than significant. Consistent with the analysis in the EIR, the Reduced Lorenzo Project Plus Medical Clinic's and the related projects' potential cumulative impacts to electricity would also be less than significant.

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Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant electricity impacts or result in a substantial increase in the severity of those effects as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

Utilities – Natural Gas (Draft EIR § IV.M.5)

The addition of 7,500 square feet of medical clinic uses could result in an increased demand for natural gas by the Reduced Lorenzo Project. As shown in Table 8, below, the medical clinic uses would consume approximately 525 cubic feet of natural gas per day. However, as previously analyzed in the Supplemental CEQA Analysis of Reduced Density Proposal, the reduction of residential units proposed for Site B under the Reduced Lorenzo Project would reduce natural gas demand across the Project site compared to the rate analyzed in the EIR for the Original Lorenzo Project. As shown in Table 8, even after addition of medical clinic uses, overall natural gas demand would be lower under the Reduced Lorenzo Project Plus Medical Clinic scenario than analyzed in the EIR. Therefore, the Draft EIR’s analysis for natural gas demand would not change based on the Reduced Lorenzo Project Plus Medical Clinic scenario.

**Table 8
Estimated Natural Gas Consumption**

Land Use	Size	Consumption Rate	Total (cf/day)
Multi-Family Residential Units	1,400 units	134 cf/unit/day	187,600
Restaurant/Retail	34,000 sf	0.1 cf/sf/day	3,400
Original Lorenzo Project Total			191,000
Existing Uses Total			0
Original Lorenzo Project Net Increase in Natural Gas Consumption			191,000
Less Reduction of 349 Residential Units on Site B under Reduced Lorenzo Project			(46,766)
Reduced Lorenzo Project Net Increase in Natural Gas Consumption			144,234
Medical Clinic	7,500 sf	0.07 cf/sf/day	525
Medical Clinic Total			525
Reduced Lorenzo Project Total			144,234
Plus Medical Clinic			525
Reduced Lorenzo Project Plus Medical Clinic Net Increase in Natural Gas Consumption			144,759
<i>^a Rate for “Office” used. Source: SCAQMD, CEQA Air Quality Handbook, Table A9-11-A, 1993.</i>			

Memorandum

Subject: CEQA Analysis for Addition of 7,500 square feet of Clinic Space to Palmer Lorenzo Project (Case No. ENV-2006-9471-EIR)

Level of Significance After Mitigation

Mitigation Measures M-25 through M-26 set forth in the Draft EIR will also be required and implemented under the Reduced Lorenzo Project Plus Medical Clinic scenario. With implementation of these mitigation measures, impacts on natural gas supply would remain less than significant. Consistent with the analysis in the EIR, the Reduced Lorenzo Project Plus Medical Clinic's and the related projects' potential cumulative impacts to natural gas would also be less than significant.

With regard to the criteria set forth in CEQA Section 15088.5 (a), the changes proposed by the addition of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant natural gas impacts or result in a substantial increase in the severity of those effects as previously identified in the EIR. Therefore, recirculation of the EIR is not warranted.

CONCLUSIONS

As demonstrated in the analyses above, addition of 7,500 square feet of medical clinic uses to the Reduced Lorenzo Project would not result in any new significant environmental impacts, require a new mitigation measure, or result in a substantial increase in the severity of an environmental impact from that identified in the EIR.

APPENDIX A
Supplemental Traffic Analysis

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TECHNICAL MEMORANDUM

Date: March 7, 2011

To: Lainie Herrera, Dudek

From: Brian A. Marchetti, AICP

Subject: The Lorenzo Project – Supplemental Traffic Analysis with Medical Clinic Use
(KOA Corporation Project JA6199X)

This memorandum provides traffic analysis updates for the Lorenzo project to address two issues. For purposes of this memorandum and unless otherwise specifically noted, the project consists of 1,051 residential units and 34,000 square feet of retail/restaurant uses. The number of residential units provided under the project was recently reduced from the 1,400 residential unit total analyzed in the Lorenzo project's Draft and Final Environmental Impact Report (EIR).

First, this memorandum provides updates to the project trip generation and impact analysis to address CEQA issues related to the recent *Sunnyvale* court case decision, whereby the California Court of Appeal upheld a superior court decision that existing physical traffic conditions should be used as the baseline to determine a project's potential traffic impacts, in addition to future traffic conditions that may exist when a project is actually built-out.

To address this decision, the existing (2008) plus project conditions for the project were analyzed, without ambient growth or trip generation of planned area projects. Based on this analysis, it was found that the project alone would not trigger any significant intersection impacts at any of the 11 study intersections.

Second, this memorandum provides an additional analysis to review the potential impacts related to the addition of a 7,500 square foot medical clinic to the project (the Medical Clinic Scenario). The analysis included revising the project trip generation totals, based on the addition of 7,500 square feet of medical clinic space in the project that has been defined by G.H. Palmer Associates; reviewing potential project impacts for both existing (2008) plus project conditions and future (2013) post-project conditions; and verifying mitigation measures. The 7,500 square feet of medical clinic space would not reduce the 34,000 square feet of proposed retail/restaurant uses or the 1,051 proposed residential units in the project.

With the medical clinic addition to the analysis, it was found that impacts of the Medical Clinic Scenario are within the scope of the identified impacts in the Lorenzo project EIR, and no new impacts would be created.

A. Existing (2008) plus Project Analysis

The existing (2008) plus project conditions analysis was conducted to review potential impacts to the study area based solely on the project itself. The analysis utilized the 2008 traffic study scenario details from the EIR (trip generation, distribution, and assignment), with the recent reduction of proposed residential units to 1,051, for the 11 study intersections as the basis for review. The future conditions, which include ambient growth and related projects, were excluded in this analysis.

Tables 1 and 2 provide the existing (2008) plus project a.m. and p.m. peak-hour level of service (LOS) values and determinations of impacts for the project study intersections.

Table 1 – Existing (2008) plus Project LOS Impacts – AM Peak Hour

ID#	Intersection *	Existing (2008) Conditions		Existing (2008) + Project Conditions		Diff vs. Exist	Signif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.780	C	0.783	C	0.003	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.442	A	0.432	A	-0.010	No
3	Figueroa St. / 23rd St.	0.799	C	0.803	D	0.004	No
4	Flower St. / 23rd St.	0.294	A	0.272	A	-0.022	No
5	Grand Ave. / 23rd St.	0.498	A	0.536	A	0.038	No
6	Hoover St. / Adams Blvd.	0.210	A	0.210	A	0.000	No
7	Figueroa St. / Adams Blvd.	0.793	C	0.788	C	-0.005	No
8	Flower St. / Adams Blvd.	0.393	A	0.385	A	-0.008	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.555	A	0.536	A	-0.019	No
10	Grand Ave. / Adams Blvd.	0.585	A	0.595	A	0.010	No
11	Figueroa St. / Jefferson Blvd.	0.860	D	0.857	D	-0.003	No

* All study intersections have existing ATSAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

Table 2 – Existing (2008) plus Project LOS Impacts – PM Peak Hour

ID#	Intersection *	Existing (2008) Conditions		Existing (2008) + Project Conditions		Diff vs. Exist	Signif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.709	C	0.712	C	0.003	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.300	A	0.306	A	0.006	No
3	Figueroa St. / 23rd St.	0.694	B	0.696	B	0.002	No
4	Flower St. / 23rd St.	0.593	A	0.591	A	-0.002	No
5	Grand Ave. / 23rd St.	0.575	A	0.558	A	-0.017	No
6	Hoover St. / Adams Blvd.	0.326	A	0.326	A	0.000	No
7	Figueroa St. / Adams Blvd.	0.872	D	0.872	D	0.000	No
8	Flower St. / Adams Blvd.	0.771	C	0.776	C	0.005	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.654	B	0.650	B	-0.004	No
10	Grand Ave. / Adams Blvd.	0.533	A	0.546	A	0.013	No
11	Figueroa St. / Jefferson Blvd.	0.988	E	0.988	E	0.000	No

* All study intersections have existing ATISAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

The existing (2008) plus project operating conditions during the a.m. and p.m. peak hours for 10 of the 11 study intersections would remain within good LOS values (D or better), under both the existing conditions and existing with project conditions scenarios. Only one intersection, Figueroa Street and Jefferson Boulevard, would operate at a poor level of service of E during the p.m. peak hour.

The addition of the project would not create any significant impacts to any of the study intersections, as none of the intersections would meet or exceed significant impact thresholds. In some instances, operating conditions would improve at some intersections due to the net difference in trips between the existing and proposed uses.

Attachment A provides applicable portions of the Los Angeles Department of Transportation (LADOT) *Traffic Study Policies and Procedures* document, which define LOS and significant transportation impacts.

B. Analysis of Modified Non-Residential Component

The analysis of the potential inclusion of a 7,500 square-foot medical clinic within the project (the Medical Clinic Scenario) included a review of project impacts for existing (2008) plus project conditions and future (2013) post-project conditions.

Project Trip Generation

The project trip generation was updated using rates defined within *Trip Generation (7th Edition)*, published by the Institute of Transportation Engineers (ITE), in order to match the current rate source in 2008. The

trip distribution and assignment remained the same as in the Lorenzo project EIR for the updated analysis.

The 2008 traffic study trip generation was calculated as negative (net total) 184 daily trips, 14 a.m. peak-hour trips, and a negative (net total) two p.m. peak-hour trips. The 2008 trip generation inputs included a total of 1,400 residential units and a 34,000 square-foot retail commercial space. A 50 percent trip reduction was applied to commercial uses, and a 25 percent trip reduction was applied to residential uses.

Table 3 provides the updated project trip generation summary, based on the recent reduction of proposed residential units to 1,051 and the addition of the medical clinic square footage under the Medical Clinic Scenario. In order to match trip generation credit used in the 2008 analysis, transit-use reductions were applied at 50 percent for the commercial uses and at 25 percent for the residential uses.

Medical Clinic Scenario

The Medical Clinic Scenario included the addition of the proposed 7,500 square foot Medical Clinic into the previously proposed land uses without any reduction of the 34,000 square feet of proposed retail/restaurant uses.

The bottom row of Table 3 indicates that the project Medical Clinic Scenario would generate negative 344 daily trips, negative 43 a.m. peak-hour trips (negative 142 inbound trips and 99 outbound trips), and 22 p.m. peak-hour trips (115 inbound trips and negative 93 outbound trips).

Table 3 – Project Trip Generation – Medical Clinic Scenario

TRIP GENERATION RATES									
Land Use	Intensity	Units	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Mid-Rise Apartments (Land Use 223) **	-	D.U.	4.20	0.30	0.09	0.21	0.39	0.23	0.16
High Rise Apartments (Land Use 222)	-	D.U.	4.20	0.30	0.08	0.23	0.35	0.21	0.14
Hospital (Land Use 610)	-	KSF	17.57	1.20	0.80	0.40	1.18	0.39	0.79
General Office (Land Use 710)	-	KSF	11.01	1.55	1.36	0.19	1.49	0.25	1.24
Medical Office (Land Use 720)	-	KSF	36.13	2.48	1.96	0.52	3.72	1.00	2.72
Sit-Down Restaurant (Land Use 931)	-	KSF	89.95	0.81	0.41	0.40	7.49	5.02	2.47
Shopping Center (Land Use 820)	-	KSF	42.94	3.75	1.80	1.95	3.75	1.80	1.95
FORECAST TRIP GENERATION									
Existing Use									
Land Use	Intensity	Units	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Hospital (Land Use 610)	190.380	KSF	3,345	228	153	75	225	74	151
General Office (Land Use 710)	21.000	KSF	231	33	29	4	31	5	26
Medical Office (Land Use 720)	37.500	KSF	1,355	93	73	20	140	38	102
Total Existing Use			4,931	354	255	99	395	117	278
Proposed Use									
Mid-Rise Apartments (Land Use 223) - Main Site	919.000	D.U.	3,860	276	85	190	358	208	151
High Rise Apartments (Land Use 222) - Adjacent to the Freeway	132.000	D.U.	554	40	10	30	46	28	18
Sit-Down Restaurant (Land Use 932) *	6.000	KSF	405	4	2	2	34	23	11
Shopping Center (Land Use 820) *	28.000	KSF	601	53	25	27	52	25	27
Medical Clinic/Office (Land Use 720)	7.500	KSF	271	19	15	4	28	8	20
Transit Commuter Credit - Future Exposition Line (25%) - Residential Uses Only			-1,104	-79	-24	-55	-101	-59	-42
Total Proposed Use			4,588	311	113	198	417	232	185
Total Existing Use			4,931	354	255	99	395	117	278
TOTAL NET TRIP GENERATION			-344	-43	-142	99	21	115	-93

Note: Hospital intensity (for existing use calcs) includes the main hospital, engineering, and rehab buildings.

PM rate used for the AM peak for transit center retail with 50-50 inbound/outbound split

* Sit-down restaurant reduced by 25% and shopping center retail trips reduced by 50% due to orientation to rail transit station

** Assumes high-rise apartment daily rate due to negligible daily rate for mid-rise apartment

Source: ITE Trip Generation, 7th Edition

Existing (2008) plus Project Analysis

An existing (2008) plus project conditions analysis for the addition of the proposed 7,500 square feet of medical clinic space to the project was conducted to review potential impacts based exclusively from the project.

Tables 4 and 5 summarize the 11 study intersections and their respective LOS values and impacts during the a.m. and p.m. peak hours.

**Table 4 – Existing (2008) plus Project AM Peak-Hour LOS & Impacts –
Medical Clinic Scenario**

ID#	Intersection *	Existing (2008) Conditions		Existing (2008) + Project Conditions		Diff vs. Exist	Signif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.780	C	0.783	C	0.003	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.442	A	0.433	A	-0.009	No
3	Figueroa St. / 23rd St.	0.799	C	0.805	D	0.006	No
4	Flower St. / 23rd St.	0.294	A	0.274	A	-0.020	No
5	Grand Ave. / 23rd St.	0.498	A	0.538	A	0.040	No
6	Hoover St. / Adams Blvd.	0.210	A	0.210	A	0.000	No
7	Figueroa St. / Adams Blvd.	0.793	C	0.789	C	-0.004	No
8	Flower St. / Adams Blvd.	0.393	A	0.386	A	-0.007	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.555	A	0.538	A	-0.017	No
10	Grand Ave. / Adams Blvd.	0.585	A	0.595	A	0.010	No
11	Figueroa St. / Jefferson Blvd.	0.860	D	0.857	D	-0.003	No

* All study intersections have existing ATSAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

**Table 5 – Existing (2008) plus Project PM Peak-Hour LOS & Impacts –
Medical Clinic Scenario**

ID#	Intersection *	Existing (2008) Conditions		Existing (2008) + Project Conditions		Diff vs. Exist	Signif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.709	C	0.712	C	0.003	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.300	A	0.307	A	0.007	No
3	Figueroa St. / 23rd St.	0.694	B	0.699	B	0.005	No
4	Flower St. / 23rd St.	0.593	A	0.593	A	0.000	No
5	Grand Ave. / 23rd St.	0.575	A	0.567	A	-0.008	No
6	Hoover St. / Adams Blvd.	0.326	A	0.326	A	0.000	No
7	Figueroa St. / Adams Blvd.	0.872	D	0.872	D	0.000	No
8	Flower St. / Adams Blvd.	0.771	C	0.777	C	0.006	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.654	B	0.652	B	-0.002	No
10	Grand Ave. / Adams Blvd.	0.533	A	0.547	A	0.014	No
11	Figueroa St. / Jefferson Blvd.	0.988	E	0.988	E	0.000	No

* All study intersections have existing ATISAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

Study intersection operations under existing conditions plus the Medical Clinic Scenario would remain within good LOS values (D or better) for 10 of the 11 intersections. The only intersection that would operate at a poor level of service during the p.m. peak hour would be Figueroa Street and Jefferson Boulevard (LOS E).

There would not be any significant impacts at the study intersections under the Medical Clinic Scenario for either peak-hour period, as significant impact thresholds were not exceeded for any of the study intersections, including those with LOS values of D or E.

Attachment A provides the LADOT definitions for LOS values and significant transportation impacts, as provided in the City's *Traffic Study Policies and Procedures* document.

Future (2013) Post-Project Analysis

Future (2013) post-project conditions for the project, with the addition of a 7,500 square foot medical clinic have been analyzed. The analysis included the ambient growth rate factor of one percent for a total factor of 1.07, any planned area projects within a half-mile radius of the project site, and the project itself (including the proposed 7,500 square foot medical clinic space).

The a.m. and p.m. peak-hour analyses are summarized in Tables 6 and 7. The tables include future (2013) pre-project conditions, and future (2013) post-project conditions, their respective LOS values, and significant impacts determinations for a particular intersection.

**Table 6 – Future (2013) Post-Project AM Peak-Hour LOS & Impacts –
Medical Clinic Scenario**

ID#	Intersection **	Future (2013) Pre-Project Conditions *		Future (2013) Post-Project Conditions		Diff vs. Pre-Proj	Signif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.840	D	0.840	D	0.000	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.518	A	0.510	A	-0.008	No
3	Figueroa St. / 23rd St.	1.008	F	1.006	F	-0.002	No
4	Flower St. / 23rd St.	0.365	A	0.335	A	-0.030	No
5	Grand Ave. / 23rd St.	0.758	C	0.784	C	0.026	No
6	Hoover St. / Adams Blvd.	0.252	A	0.252	A	0.000	No
7	Figueroa St. / Adams Blvd.	0.908	E	0.904	E	-0.004	No
8	Flower St. / Adams Blvd.	0.447	A	0.439	A	-0.008	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.623	B	0.606	B	-0.017	No
10	Grand Ave. / Adams Blvd.	0.718	C	0.722	C	0.004	No
11	Figueroa St. / Jefferson Blvd.	1.010	F	1.006	F	-0.004	No

* Includes analysis of traffic volume increases from ambient growth and planned area projects.

** All study intersections have existing ATSAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

**Table 7 – Future (2013) Post-Project PM Peak-Hour LOS & Impacts –
Medical Clinic Scenario**

ID#	Intersection **	Future (2013) Pre-Project Conditions *		Future (2013) Post-Project Conditions		Diff vs. Pre-Proj	Signif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.938	E	0.941	E	0.003	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.408	A	0.415	A	0.007	No
3	Figueroa St. / 23rd St.	1.004	F	1.005	F	0.001	No
4	Flower St. / 23rd St.	0.738	C	0.762	C	0.024	No
5	Grand Ave. / 23rd St.	0.876	D	0.868	D	-0.008	No
6	Hoover St. / Adams Blvd.	0.411	A	0.408	A	-0.003	No
7	Figueroa St. / Adams Blvd.	1.072	F	1.068	F	-0.004	No
8	Flower St. / Adams Blvd.	0.854	D	0.860	D	0.006	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.739	C	0.740	C	0.001	No
10	Grand Ave. / Adams Blvd.	0.708	C	0.719	C	0.011	No
11	Figueroa St. / Jefferson Blvd.	1.228	F	1.228	F	0.000	No

* Includes analysis of traffic volume increases from ambient growth and planned area projects.

** All study intersections have existing ATSAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

There would not be any significant impacts at the study intersections under the Medical Clinic Scenario for either peak hour period, as significant impact thresholds were not exceeded for any of the study intersections, including those with LOS values of E or F.

Attachment A provides the LADOT *Traffic Study Policies and Procedures* for defining LOS and significant transportation impacts.

Comparison to EIR Analysis

The Final EIR updated traffic analysis is summarized in Table 8 (a.m. peak hour) and Table 9 (p.m. peak hour), which analyzed a project with 1,400 residential units and 34,000 square feet of retail/restaurant uses.

**Table 8 – Future (2013) AM Peak-Hour LOS & Impacts –
From EIR Analysis**

ID#	Intersection **	Future (2013) Pre-Project Conditions *		Future (2013) Post-Project Conditions		Diff vs. Pre-Proj	Signif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.840	D	0.841	D	0.001	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.518	A	0.510	A	-0.008	No
3	Figueroa St. / 23rd St.	1.008	F	1.013	F	0.005	No
4	Flower St. / 23rd St.	0.365	A	0.336	A	-0.029	No
5	Grand Ave. / 23rd St.	0.758	C	0.801	D	0.043	Yes
6	Hoover St. / Adams Blvd.	0.252	A	0.246	A	-0.006	No
7	Figueroa St. / Adams Blvd.	0.908	E	0.907	E	-0.001	No
8	Flower St. / Adams Blvd.	0.447	A	0.440	A	-0.007	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.623	B	0.607	B	-0.016	No
10	Grand Ave. / Adams Blvd.	0.718	C	0.724	C	0.006	No
11	Figueroa St. / Jefferson Blvd.	1.010	F	1.006	F	-0.004	No

* Includes analysis of traffic volume increases from ambient growth and planned area projects.

** All study intersections have existing ATSAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

**Table 9 – Future (2013) PM Peak-Hour LOS & Impacts –
From EIR Analysis**

ID#	Intersection **	Future (2013) Pre-Project Conditions *		Future (2013) Post-Project Conditions		Diff vs. Pre-Proj	Sgnif?
		V/C	LOS	V/C	LOS		
1	Figueroa St. / Washington Blvd.	0.938	E	0.942	E	0.004	No
2	Southbound I-110 Off-Ramp / 23rd St.	0.408	A	0.417	A	0.009	No
3	Figueroa St. / 23rd St.	1.004	F	1.010	F	0.006	No
4	Flower St. / 23rd St.	0.738	C	0.772	C	0.034	No
5	Grand Ave. / 23rd St.	0.876	D	0.882	D	0.006	No
6	Hoover St. / Adams Blvd.	0.411	A	0.408	A	-0.003	No
7	Figueroa St. / Adams Blvd.	1.072	F	1.069	F	-0.003	No
8	Flower St. / Adams Blvd.	0.854	D	0.863	D	0.009	No
9	Northbound I-110 Off-Ramp / Adams Blvd.	0.739	C	0.744	C	0.005	No
10	Grand Ave. / Adams Blvd.	0.708	C	0.724	C	0.016	No
11	Figueroa St. / Jefferson Blvd.	1.228	F	1.229	F	0.001	No

* Includes analysis of traffic volume increases from ambient growth and planned area projects.

** All study intersections have existing ATISAC synchronization equipment. Consistent with LADOT policy, operations credits of 0.07 per intersection were taken.

As indicated by the impact determinations within Tables 8 and 9 above, the Final EIR traffic analysis defined a significant impact at the intersection of Grand Ave./23rd Street in the a.m. peak hour. As shown in Tables 6 and 7, the project under the Medical Clinic Scenario would not cause a significant impact at this intersection.

D. Conclusions

The analysis for the existing (2008) plus project scenario indicated that the project alone would not trigger any significant intersection impacts at any of the 11 study intersections. The intersection operations would remain within good LOS values at 10 of the 11 study intersection with one intersection operating at a poor LOS of E.

The analysis of the proposed inclusion of a medical clinic in the project was based on a 7,500 square-foot medical clinic, under an existing (2008) plus project scenario and a future (2013) plus project scenario. The following was determined from this analysis:

- Existing (2008) plus Project – Under the Medical Clinic Scenario, the revised project, would not create significant impacts at any of the 11 study intersections.
- Future (2013) plus Project – Under the Medical Clinic Scenario, the revised project would also not create significant impacts at the study intersections.

With the medical clinic addition, significant impacts would not occur based on this updated analysis, and the mitigation measures identified within the EIR would not be required. The reduction in project residential units, from the totals analyzed for the 2008 analysis, were the primary source of reduction in impacts.

ATTACHMENT A TRAFFIC DEFINITIONS AND CRITERIA

LEVEL OF SERVICE DEFINITIONS

LOS	Interpretation	Signalized Intersection Volume to Capacity Ratio (CMA)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 - 0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900
E	Poor operation. Some long standing vehicular queues develop on critical approaches.	0.901 - 1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000
Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 212, 1982		

SIGNIFICANT TRANSPORTATION IMPACT – CITY OF LOS ANGELES

Level of Service	Final V/C*	Project Related v/c increase
C	> 0.701 – 0.80	Equal to or greater than 0.040
D	> 0.801 – 0.90	Equal to or greater than 0.020
E and F	> 0.901 or more	Equal to or greater than 0.010

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient and related project growth, and without proposed traffic impact mitigations.

APPENDIX B
Air Quality Modeling

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APPENDIX B-1
URBEMIS2007 Operational Emissions
for the
Reduced Lorenzo Project
(Year 2013)

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: \\Hqtr-data1\projects_old\300.Environmental\6868 Palmer Lorenzo\AQ files\URBEMIS\2009_Rev_Palmer_OP_311.urb924

Project Name: Palmer Lorenzo - operation

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	75.74	14.09	9.21	0.00	0.04	0.04	17,922.25

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	37.05	28.10	361.10	0.43	3.66	2.25	41,410.83
TOTALS (lbs/day, mitigated)	33.05	24.01	308.27	0.37	3.13	1.92	35,353.20
Percent Reduction	10.80	14.56	14.63	13.95	14.48	14.67	14.63

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	112.79	42.19	370.31	0.43	3.70	2.29	59,333.08

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	1.08	14.05	6.12	0.00	0.03	0.03	17,916.63
Hearth							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	71.82						
Architectural Coatings	2.59						
TOTALS (lbs/day, unmitigated)	75.74	14.09	9.21	0.00	0.04	0.04	17,922.25

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Apartments high rise	33.75	25.18	325.63	0.39	3.30	2.03	37,332.12
Regnl shop. center	3.30	2.92	35.47	0.04	0.36	0.22	4,078.71
TOTALS (lbs/day, unmitigated)	37.05	28.10	361.10	0.43	3.66	2.25	41,410.83

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments high rise	29.91	21.24	274.63	0.33	2.79	1.71	31,484.77
Regnl shop. center	3.14	2.77	33.64	0.04	0.34	0.21	3,868.43
TOTALS (lbs/day, mitigated)	33.05	24.01	308.27	0.37	3.13	1.92	35,353.20

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments high rise	9.50	3.15	dwelling units	1,400.00	4,410.00	39,541.10
Regnl shop. center		21.47	1000 sq ft	34.00	729.98	4,339.45
					5,139.98	43,880.55

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	59.4	0.4	99.4	0.2
Light Truck < 3750 lbs	8.5	1.4	95.9	2.7
Light Truck 3751-5750 lbs	26.7	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.8	0.9	99.1	0.0

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Lite-Heavy Truck 8501-10,000 lbs	0.1	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.1	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: \\Hqtr-data1\projects_old\300.Environmental\6868 Palmer Lorenzo\AQ files\URBEMIS\2009_Rev_Palmer_OP_311.urb924

Project Name: Palmer Lorenzo - operation

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	75.49	14.05	6.12	0.00	0.03	0.03	17,916.63

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	36.19	34.67	345.06	0.34	3.66	2.25	37,216.00
TOTALS (lbs/day, mitigated)	31.58	29.62	294.66	0.29	3.13	1.92	31,771.82
Percent Reduction	12.74	14.57	14.61	14.71	14.48	14.67	14.63

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	111.68	48.72	351.18	0.34	3.69	2.28	55,132.63

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

3/17/2011 12:42:28 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	1.08	14.05	6.12	0.00	0.03	0.03	17,916.63
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	71.82						
Architectural Coatings	2.59						
TOTALS (lbs/day, unmitigated)	75.49	14.05	6.12	0.00	0.03	0.03	17,916.63

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Apartments high rise	32.47	31.09	310.40	0.31	3.30	2.03	33,552.13
Regnl shop. center	3.72	3.58	34.66	0.03	0.36	0.22	3,663.87
TOTALS (lbs/day, unmitigated)	36.19	34.67	345.06	0.34	3.66	2.25	37,216.00

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments high rise	28.05	26.22	261.78	0.26	2.79	1.71	28,296.84
Regnl shop. center	3.53	3.40	32.88	0.03	0.34	0.21	3,474.98
TOTALS (lbs/day, mitigated)	31.58	29.62	294.66	0.29	3.13	1.92	31,771.82

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments high rise	9.50	3.15	dwelling units	1,400.00	4,410.00	39,541.10
Regnl shop. center		21.47	1000 sq ft	34.00	729.98	4,339.45
					5,139.98	43,880.55

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	59.4	0.4	99.4	0.2
Light Truck < 3750 lbs	8.5	1.4	95.9	2.7
Light Truck 3751-5750 lbs	26.7	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.8	0.9	99.1	0.0

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Lite-Heavy Truck 8501-10,000 lbs	0.1	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.1	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

APPENDIX B-2
URBEMIS2007 Operational Emissions
for the
Reduced Lorenzo Project Plus Medical Clinic
(Year 2013)

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: \\Hqtr-data1\projects_old\300.Environmental\6868 Palmer Lorenzo\AQ files\URBEMIS\2011_Palmer_OP_311.urb924

Project Name: Palmer Lorenzo - operation

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	57.27	10.76	10.88	0.00	0.04	0.04	13,619.83

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	31.00	23.96	306.08	0.37	3.11	1.91	35,073.00
TOTALS (lbs/day, mitigated)	27.83	20.73	264.60	0.32	2.68	1.64	30,319.99
Percent Reduction	10.23	13.48	13.55	13.51	13.83	14.14	13.55

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	88.27	34.72	316.96	0.37	3.15	1.95	48,692.83

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

3/17/2011 12:07:33 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.82	10.68	4.70	0.00	0.02	0.02	13,608.59
Hearth							
Landscape	0.49	0.08	6.18	0.00	0.02	0.02	11.24
Consumer Products	53.92						
Architectural Coatings	2.04						
TOTALS (lbs/day, unmitigated)	57.27	10.76	10.88	0.00	0.04	0.04	13,619.83

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Apartments high rise	25.34	18.91	244.46	0.29	2.48	1.52	28,025.76
Quality resturant	1.72	1.53	18.68	0.02	0.19	0.12	2,111.01
Regnl shop. center	2.72	2.40	29.21	0.04	0.30	0.18	3,358.94
Medical office building	1.22	1.12	13.73	0.02	0.14	0.09	1,577.29
TOTALS (lbs/day, unmitigated)	31.00	23.96	306.08	0.37	3.11	1.91	35,073.00

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments high rise	22.45	15.94	206.17	0.25	2.09	1.28	23,636.07
Quality resturant	1.63	1.45	17.71	0.02	0.18	0.11	2,002.18
Regnl shop. center	2.59	2.28	27.70	0.03	0.28	0.17	3,185.77
Medical office building	1.16	1.06	13.02	0.02	0.13	0.08	1,495.97
TOTALS (lbs/day, mitigated)	27.83	20.73	264.60	0.32	2.68	1.64	30,319.99

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments high rise	9.50	3.15	dwelling units	1,051.00	3,310.65	29,684.07
Quality resturant		67.50	1000 sq ft	6.00	405.00	2,237.38
Regnl shop. center		21.47	1000 sq ft	28.00	601.16	3,573.66
Medical office building		36.13	1000 sq ft	7.50	270.98	1,677.10
					4,587.79	37,172.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	59.4	0.4	99.4	0.2
Light Truck < 3750 lbs	8.5	1.4	95.9	2.7
Light Truck 3751-5750 lbs	26.7	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.8	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.1	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.1	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
Regnl shop. center				2.0	1.0	97.0
Medical office building				7.0	3.5	89.5

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: \\Hqtr-data1\projects_old\300.Environmental\6868 Palmer Lorenzo\AQ files\URBEMIS\2011_Palmer_OP_311.urb924

Project Name: Palmer Lorenzo - operation

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	56.78	10.68	4.70	0.00	0.02	0.02	13,608.59

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	30.84	29.55	293.26	0.29	3.11	1.91	31,519.47
TOTALS (lbs/day, mitigated)	27.20	25.57	253.64	0.26	2.68	1.64	27,247.82
Percent Reduction	11.80	13.47	13.51	10.34	13.83	14.14	13.55

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	87.62	40.23	297.96	0.29	3.13	1.93	45,128.06

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

3/17/2011 12:07:54 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.82	10.68	4.70	0.00	0.02	0.02	13,608.59
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	53.92						
Architectural Coatings	2.04						
TOTALS (lbs/day, unmitigated)	56.78	10.68	4.70	0.00	0.02	0.02	13,608.59

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Apartments high rise	24.38	23.34	233.02	0.23	2.48	1.52	25,188.06
Quality resturant	2.00	1.88	18.32	0.02	0.19	0.12	1,897.13
Regnl shop. center	3.06	2.95	28.55	0.03	0.30	0.18	3,017.31
Medical office building	1.40	1.38	13.37	0.01	0.14	0.09	1,416.97
TOTALS (lbs/day, unmitigated)	30.84	29.55	293.26	0.29	3.11	1.91	31,519.47

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments high rise	21.06	19.68	196.52	0.20	2.09	1.28	21,242.84
Quality resturant	1.90	1.78	17.37	0.02	0.18	0.11	1,799.32
Regnl shop. center	2.91	2.80	27.07	0.03	0.28	0.17	2,861.75
Medical office building	1.33	1.31	12.68	0.01	0.13	0.08	1,343.91
TOTALS (lbs/day, mitigated)	27.20	25.57	253.64	0.26	2.68	1.64	27,247.82

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments high rise	9.50	3.15	dwelling units	1,051.00	3,310.65	29,684.07
Quality resturant		67.50	1000 sq ft	6.00	405.00	2,237.38
Regnl shop. center		21.47	1000 sq ft	28.00	601.16	3,573.66
Medical office building		36.13	1000 sq ft	7.50	270.98	1,677.10
					4,587.79	37,172.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	59.4	0.4	99.4	0.2
Light Truck < 3750 lbs	8.5	1.4	95.9	2.7
Light Truck 3751-5750 lbs	26.7	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.8	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.1	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.1	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
Regnl shop. center				2.0	1.0	97.0
Medical office building				7.0	3.5	89.5

APPENDIX B-3
URBEMIS2007 Operational Emissions
for the
Reduced Lorenzo Project Plus Medical Clinic
(Year 2008)

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: \\Hqtr-data1\projects_old\300.Environmental\6868 Palmer Lorenzo\AQ files\URBEMIS\2008_Palmer_OP_311.urb924

Project Name: Palmer Lorenzo - operation

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	58.42	10.75	11.35	0.00	0.04	0.04	13,619.59

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	39.69	33.95	414.53	0.37	3.01	1.81	35,152.21
TOTALS (lbs/day, mitigated)	35.60	29.38	358.38	0.32	2.60	1.57	30,388.44
Percent Reduction	10.30	13.46	13.55	13.51	13.62	13.26	13.55

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	98.11	44.70	425.88	0.37	3.05	1.85	48,771.80

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

3/18/2011 12:11:41 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.82	10.68	4.70	0.00	0.02	0.02	13,608.59
Hearth							
Landscape	0.55	0.07	6.65	0.00	0.02	0.02	11.00
Consumer Products	53.92						
Architectural Coatings	3.13						
TOTALS (lbs/day, unmitigated)	58.42	10.75	11.35	0.00	0.04	0.04	13,619.59

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Apartments high rise	32.40	26.80	330.96	0.29	2.40	1.45	28,089.29
Quality resturant	2.22	2.16	25.35	0.02	0.18	0.11	2,115.77
Regnl shop. center	3.49	3.40	39.61	0.04	0.29	0.17	3,366.36
Medical office building	1.58	1.59	18.61	0.02	0.14	0.08	1,580.79
TOTALS (lbs/day, unmitigated)	39.69	33.95	414.53	0.37	3.01	1.81	35,152.21

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments high rise	28.66	22.61	279.12	0.25	2.03	1.22	23,689.65
Quality resturant	2.11	2.05	24.04	0.02	0.17	0.10	2,006.69
Regnl shop. center	3.33	3.22	37.57	0.03	0.27	0.17	3,192.81
Medical office building	1.50	1.50	17.65	0.02	0.13	0.08	1,499.29
TOTALS (lbs/day, mitigated)	35.60	29.38	358.38	0.32	2.60	1.57	30,388.44

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2008 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments high rise	9.50	3.15	dwelling units	1,051.00	3,310.65	29,684.07
Quality resturant		67.50	1000 sq ft	6.00	405.00	2,237.38
Regnl shop. center		21.47	1000 sq ft	28.00	601.16	3,573.66
Medical office building		36.13	1000 sq ft	7.50	270.98	1,677.10
					4,587.79	37,172.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	59.4	0.4	99.4	0.2
Light Truck < 3750 lbs	8.5	1.4	95.9	2.7
Light Truck 3751-5750 lbs	26.7	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.8	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.1	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.1	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
Regnl shop. center				2.0	1.0	97.0
Medical office building				7.0	3.5	89.5

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: \\Hqtr-data1\projects_old\300.Environmental\6868 Palmer Lorenzo\AQ files\URBEMIS\2008_Palmer_OP_311.urb924

Project Name: Palmer Lorenzo - operation

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	57.87	10.68	4.70	0.00	0.02	0.02	13,608.59

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	39.71	42.02	394.03	0.29	3.01	1.81	31,641.23
TOTALS (lbs/day, mitigated)	34.98	36.37	340.85	0.26	2.60	1.57	27,353.06
Percent Reduction	11.91	13.45	13.50	10.34	13.62	13.26	13.55

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	97.58	52.70	398.73	0.29	3.03	1.83	45,249.82

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

3/18/2011 12:12:01 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.82	10.68	4.70	0.00	0.02	0.02	13,608.59
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	53.92						
Architectural Coatings	3.13						
TOTALS (lbs/day, unmitigated)	57.87	10.68	4.70	0.00	0.02	0.02	13,608.59

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Apartments high rise	31.31	33.20	312.75	0.23	2.40	1.45	25,285.58
Quality resturant	2.61	2.67	24.74	0.02	0.18	0.11	1,904.44
Regnl shop. center	3.97	4.19	38.51	0.03	0.29	0.17	3,028.83
Medical office building	1.82	1.96	18.03	0.01	0.14	0.08	1,422.38
TOTALS (lbs/day, unmitigated)	39.71	42.02	394.03	0.29	3.01	1.81	31,641.23

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments high rise	27.00	28.00	263.76	0.20	2.03	1.22	21,325.08
Quality resturant	2.48	2.53	23.46	0.02	0.17	0.10	1,806.26
Regnl shop. center	3.77	3.98	36.53	0.03	0.27	0.17	2,872.67
Medical office building	1.73	1.86	17.10	0.01	0.13	0.08	1,349.05
TOTALS (lbs/day, mitigated)	34.98	36.37	340.85	0.26	2.60	1.57	27,353.06

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2008 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments high rise	9.50	3.15	dwelling units	1,051.00	3,310.65	29,684.07
Quality resturant		67.50	1000 sq ft	6.00	405.00	2,237.38
Regnl shop. center		21.47	1000 sq ft	28.00	601.16	3,573.66
Medical office building		36.13	1000 sq ft	7.50	270.98	1,677.10
					4,587.79	37,172.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	59.4	0.4	99.4	0.2
Light Truck < 3750 lbs	8.5	1.4	95.9	2.7
Light Truck 3751-5750 lbs	26.7	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.8	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.1	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.1	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
Regnl shop. center				2.0	1.0	97.0
Medical office building				7.0	3.5	89.5