Attachment No. 9
Traffic Summary

According to Culver City's Traffic Study Criteria, a significant traffic related impact occurs when an increase in traffic affects the Level of Service (or LOS) for a given intersection by a specific threshold. Thresholds differ depending on the expected LOS of a given intersection without the project compared to the intersection's LOS with the project. Surrounding developments (known as Related Projects in traffic studies), typically a mile to a mile and half from the Project and which are in various phases of development, from pre-entitlement to construction, are factored into the traffic study analysis. Related projects are assumed to be operational to ensure a conservative estimate of potential impacts that captures future growth. Developments that are occupied and operational (and for which Certificates of Occupancy have been issued) at the time the traffic study is conducted are not considered Related Projects because the traffic they generate will be captured in the traffic counts taken at study intersections. LOS itself is defined as follows:

LOS A: Excellent. No vehicle waits longer than one red light and no approach phase is fully used.
LOS B: Very good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
LOS C: Good. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
LOS D: Fair. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
LOS E: Poor. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
LOS F: Failure. Backups from nearby intersections or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Critical movement analysis or CMA represents a metric by which one can evaluate how much a CMA value increases at a study intersection given the expected surrounding future growth including the subject project under analysis. Changes in the CMA value are compared to adopted thresholds of significance that would lead to a required mitigation to offset that impact. According to Culver City Traffic Study Criteria, a significant impact is identified as an increase in the CMA value due to project-related traffic as shown in the table below:

TABLE T-1		
CC Level of Service	CC Final CMA Value	CC Project-Related Increase in CMA Value Resulting in a Significant Impact
C	> 0.700 – 0.800	equal to or greater than 0.050
D	> 0.800 – 0.900	equal to or greater than 0.040
E, F	> 0.900	equal to or greater than 0.020

The City of Los Angeles Department of Transportation (LADOT) thresholds were used for the study intersections that are in the City of Los Angeles:

TABLE T-2		
LA Level of Service	LA Final CMA Value	LA Project-Related Increase in CMA Value Resulting in a Significant Impact
C	> 0.700 – 0.800	equal to or greater than 0.040
D	> 0.800 – 0.900	equal to or greater than 0.020
E, F	> 0.900	equal to or greater than 0.010

No significant impacts are deemed to occur at LOS "A" or "B", as these operating conditions exhibit sufficient surplus capacities to accommodate large traffic increases with little effect on traffic delays.

To determine the project's impacts on study intersections, the Traffic Study calculated the number of traffic trips generated by the project using the trip generation rates outlined in the Institute of Transportation Engineers (ITE) handbook titled *Trip Generation, 9th Edition*. The project is estimated to generate approximately 691 net daily trips of which 65 trips would occur during the morning peak hour and 51 trips during the evening peak hour. No pass-by trip reductions were applied to project trips at the project driveways or the site adjacent intersection of Watseka Avenue and Washington Boulevard/Culver Boulevard. In addition to factoring in trips from related projects at the study intersections, the Traffic Study incorporated an ambient growth factor of 1.0 percent per year, compounded annually for the analysis of future conditions for the study year of 2020. The result provides the "baseline" traffic volumes for the analysis of future (2020) conditions.

The current roadway system's geometric and signal operation characteristics were assumed to prevail for the analysis of future project traffic impacts. In the Traffic Study net project volumes were combined with the Future (2020) *Without Project* traffic volumes to develop the Future (2020) *With Project* volumes, which were used to determine traffic impacts directly attributable to the Project. The results of the analysis of future traffic conditions at the study intersections are summarized below:

TABLE T-3
Critical Movement Analysis (CMA) Summary Future (2020) Without and With Project

Intersection	**Peak Hour**	**Without Project CMA**	**Without Project LOS**	**With Project CMA**	**With Project LOS**	**Impact**
Hughes Ave & Venice Blvd	AM	0.637	B	0.641	B	0.004
	PM	*0.719*	*C*	*0.724*	*C*	*0.005*
Duquesne/ Hughes Aves & Washington Blvd	AM	1.269	F	1.272	F	0.003
	PM	*0.708*	*C*	*0.713*	*C*	*0.005*
Watseka Ave & Washington/Culver Blvds	AM	0.931	E	0.931	E	0.000
	PM	*0.981*	*E*	*0.987*	*E*	*0.006*
Irving Pl & Culver Blvd	AM	0.521	A	0.522	A	0.001
	PM	*0.549*	*A*	*0.554*	*A*	*0.005*
Cardiff Ave & Culver Blvd	AM	0.404	A	0.405	A	0.001
	PM	*0.446*	*A*	*0.449*	*A*	*0.003*
Main St & Culver Blvd	AM	0.722	C	0.730	C	0.008
	PM	*0.688*	*B*	*0.691*	*B*	*0.003*
Canfield Ave & Washington/Culver Blvds	AM	0.817	D	0.819	D	0.002
	PM	*0.705*	*C*	*0.708*	*C*	*0.003*

As shown in the Table T-3 above, although the addition of project traffic would increase the CMA value at six of the intersections during the AM peak hour and all seven of the study intersections during the PM peak hour, the incremental project traffic additions would not result in a change in level of service at any study intersection. Further, none of the seven study intersections would be significantly impacted by project traffic under Future (2020) conditions based on CMA thresholds as established by Culver City and L.A. DOT (see Table T-1 and T-2 above). Based on this analysis the Traffic Study did not result in required traffic mitigations.

Other Traffic Related Topics Analyzed in the Traffic Study

Regional Traffic Impact Analysis Per Congestion Management Program: Proposition 111 enacted the Congestion Management Program (CMP) in 1990 to address the increasing public concern that traffic congestion is impacting the quality of life and economic vitality of the State of California. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. A countywide approach has been established by Metro designating a highway network that includes all state highways and principal arterials within the County. Level of service along these roadways are measured by CMP monitoring stations that are supervised by local jurisdictions (in order to implement the statutory requirements of the CMP). If the level of service standards deteriorate, then local jurisdictions must prepare a deficiency plan to meet conformance standards outlined by the countywide plan.

The local CMP requires that all CMP monitoring intersections be analyzed where a project would likely add 50 or more trips during the peak hours. The nearest such intersections are Overland Avenue and Venice Boulevard and La Cienega Boulevard and Jefferson Boulevard, located approximately half a mile west and one and a half miles east of the project, respectively. A review of the project trip distribution and net project traffic additions to the study vicinity shows that the project would not add 50 or more trips to these CMP intersections. It is estimated that the project would generate at most 6 inbound trips during the AM peak hour and 1 inbound trip during the PM peak hour at the intersection of Overland Avenue and Venice Boulevard. At the intersection of La Cienega Boulevard and Jefferson Boulevard, the project is expected to contribute at most 6 inbound trips and no outbound trips during the AM peak hour and 5 trips (1 inbound, 4 outbound) during the PM peak hour. As these volumes are below the threshold of 50 trips, the Traffic Study concluded that no further CMP intersection analysis was needed.

In addition, any CMP freeway monitoring segment where a project is expected to add 150 or more trips in any direction during the peak hours is to be analyzed. The nearest CMP freeway monitoring segments are the Santa Monica Freeway (I-10) east of Overland Avenue and the San Diego Freeway (I-405) north of Venice Boulevard. Based on the project trip generation, the project is expected to add approximately 65 trips during the AM peak hour (62 inbound and 3 outbound) and 63 trips during the PM peak hour (7 inbound, 44 outbound) to the adjacent street system. The Study concluded these amounts are less than the freeway threshold of 150 directional trips and no additional freeway analysis was needed.

Freeway Impact Screening Analysis: A freeway impact screening analysis was conducted as per LADOT Traffic Study Guidelines. The methodology from the agreement between City of Los Angeles and Caltrans District 7 on freeway impact analysis procedures was used for the freeway impact screening analysis. As per the criteria provided by the agreement, if the project meets any of the following criteria, the project applicant would be directed to work with Caltrans to prepare a freeway impact analysis, utilizing Caltrans' "Guide for the Preparation of Traffic Impact Studies":

- The project's peak hour trips would result in a one percent or more increase to the freeway mainline capacity of a freeway segment operating at LOS "E" or "F" (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The project's peak hour trips would result in a two percent or more increase to the freeway mainline capacity of a freeway segment operating at LOS "D" (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The project's peak hour trips would result in a one percent or more increase to the capacity of a freeway off-ramp operating at LOS "E" or "F" (based on an assumed ramp capacity of 850 vehicles per hour per lane); or
- The project's peak hour trips would result in a two percent or more increase to the capacity of a freeway off-ramp operating at LOS "D" (based on an assumed ramp capacity of 850 vehicles per hour per lane).

The Traffic Study analyzed the project trips along the I-10 Freeway and the I-405 Freeway using the above criteria and determined the project's peak hour trips would result in less than a one percent increase to the freeway capacity; a freeway impact analysis is not needed.