CITY OF LOS ANGELES

OFFICE OF THE CITY CLERK
200 NORTH SPRING STREET, ROOM 395
LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY AND CHECKLIST

CEQA Guidelines Section 15063

[REVISED ADDENDUM – JANUARY 7, 2016]

LEAD CITY AGENCY	**ADDRESS**	**DATE**
Los Angeles Department of City Planning	200 N. Spring St., Los Angeles, CA 90012	January 7, 2016

CONTACT PERSON Oliver Netburn, City Planning Associate **TELEPHONE NUMBER** (213) 978-1382

RESPONSIBLE AGENCIES City of Los Angeles Department of City Planning

PROJECT LOCATION: The Project Site address includes 900 S. Figueroa Street, 901 S. Flower Street and 700 W. 9th Street, Los Angeles CA 90015 (See Figure 1, Project Location Map). The Project Site is bounded by 9th Street to the north, S. Figueroa Street to the west, Flower Street to the east, and Phase I of the Approved Project (Apex I) to the south.

PROJECT TITLE/NO.	**CASE NO.** ENV-2005-1674-MND-REC1 ZA 2005-1673-ZV-ZAA-SPR-PA2 VTT No. 62367 M3
Apex II	

PREVIOUS ACTIONS CASE NO.	☑ **DOES have significant changes from previous actions.** ☐ **DOES NOT have significant changes from previous actions.**
ZA-2005-1673-ZV-ZAA-SPR-PA1, VTT-62367, ENV-2005-1674-MND	

PROJECT DESCRIPTION: The Applicant is requesting approval of a recorded Tract Map Modification, Plan Approval (ZA-2005-1673-ZV-ZAA-SPR) and Site Plan Review to permit changes to the development of Phase II of Recorded Tract 62367 to increase the authorized number of dwelling units by 60 additional units, increase open space and accommodate bicycle parking. Recorded Tract 62367 previously authorized the development of 629 residential units and 27,000 square feet of ground floor retail, for a total of 750,910 square feet of development. Phase I of Recorded Tract 62367 (referred to as "Apex I") has already been constructed and includes Tower 1 (271 dwelling units (DUs) and 4,701 square feet of retail) and the Loft Building (77 DUs and 6,575 square feet of retail). Phase II will include a 28-story mixed-use building (approximately 317 feet in height) with 341 residential units, approximately 11,687 square feet of ground floor retail space and three levels of subterranean parking. The amount of developed floor area would remain unchanged from that previously authorized by Recorded Tract 62367.

ENVIRONMENTAL SETTING: The Project Site is Lot 1 of Recorded Tract 62367 located at Figueroa and 9th Street in downtown Los Angeles. The Project Site is Phase II of Recorded Tract 62367 and is currently used for surface parking. An aerial photograph of the Project Site and surrounding area is provided in Figure 2, Aerial Photograph of the Project Site. Recent photographs depicting the environmental setting are included in Figures 3 through 7 (see attached).

COMMUNITY PLAN AREA	**AREA PLANNING COMMISSION/CNC**	**STATUS:**
Central City Community Plan Area, Central Business District Redevelopment Project, City Center Redevelopment Project	Central Los Angeles	☐ **PRELIMINARY** ☐ **PROPOSED** ■ **ADOPTED** date 01/09/2003
EXISTING ZONING [Q]R5-4D and C2-4D	**MAX. DENSITY ZONING** 7.44:1	■ **DOES CONFORM TO PLAN**
PLANNED LAND USE & ZONE High Density Residential, Regional Center Commercial	**MAX. DENSITY PLAN** 7.44:1	☐ **DOES NOT CONFORM TO PLAN**
SURROUNDING LAND USES High Density Residential, Commercial	**PROJECT DENSITY** 7.44:1	

DETERMINATION (To be completed by Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

■ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

	Senior City Planner
SIGNATURE	**TITLE**

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less that significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analysis," cross referenced).

5) Earlier analysis must be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR, or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:
   1) Earlier Analyses Used. Identify and state where they are available for review.
   2) Impacts Adequately Addressed. Identify which effects from the checklist below were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   3) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated
7) Supporting Information Sources: A sources list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whichever format is selected.
9) The explanation of each issue should identify:
   1) The significance criteria or threshold, if any, used to evaluate each question; and
   2) The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Population/Housing
☐ Agricultural and Forestry Resources	■ Hazards & Hazardous Materials	■ Public Services
■ Air Quality	☐ Hydrology/Water Quality	☐ Recreation
☐ Biological Resources	■ Land Use/Planning	■ Transportation/Traffic
☐ Cultural Resources	☐ Mineral Resources	☐ Utilities/Service Systems
■ Geology/Soils	■ Noise	☐ Mandatory Findings of Significance

INITIAL STUDY CHECKLIST (To be completed by the Lead City Agency)

BACKGROUND

PROPONENT NAME	**PHONE NUMBER**
900 South Figueroa Street Pad Investors, LLC	(562) 285-3220

PROPONENT ADDRESS

900 South Figueroa Street Pad Investors, LLC
Attn: Thomas Warren
5000 E. Spring Street, Suite 630
Long Beach, CA 90815

AGENCY REQUIRING CHECKLIST	**DATE SUBMITTED**
Los Angeles Department of City Planning	January 7, 2016

ENVIRONMENTAL RECONSIDERATION - ADDENDUM

Section 15164 of the State CEQA Guidelines states that the lead or responsible agency shall prepare an addendum to a previously certified EIR [or Negative Declaration] if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a Supplemental or Subsequent EIR have occurred. Pursuant to Section 15162, the requirement to prepare a Supplemental or Subsequent EIR (or to recirculate an MND) is only triggered when an EIR has been certified for a project, and one or more of the following occur:

> *(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
>
> *(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
>
> *(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:*
>
> > *(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
> >
> > *(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
> >
> > *(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
> >
> > *(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*

The analysis presented below evaluates the Mitigated Negative Declaration previously approved by the City of Los Angeles (ENV-2005-1674-MND (the "2005 MND")) and the environmental impacts associated with the changes proposed to the development previously authorized by Recorded Tract 62367 and evaluates whether any of the conditions in Section 15164 have occurred which would require the preparation of a Subsequent or Supplemental Mitigated Negative Declaration. Based on the analysis presented below it is concluded that the proposed changes will not result in substantially more severe effects than as analyzed in the previously adopted MND and that none of the conditions described in Section 15164 will occur. Accordingly, no Subsequent or Supplemental Mitigated Negative Declaration is required.

The analysis presented below provides an environmental review of the Apex II Mixed-Use Project (Proposed Project) pursuant to the California Environmental Quality Act (CEQA) and the City's policies for implementing

CEQA and the State CEQA Guidelines. An updated environmental analysis was conducted for each issue area identified in the CEQA Environmental Checklist to address changes that have been proposed to the Proposed Project, and to address any changes that may have occurred with respect to the environmental setting. This Revised Addendum supersedes the prior Addendum dated April 2015 under Case No. ENV-2005-1674-MND-REC1.

As compared to the April 2015 Addendum, the changes incorporated into this revised Addendum include the following substantive changes:

- The Traffic Study has been revised to incorporate current (2015) traffic count data and a revised related project list for purposes of assessing the project's cumulative impacts. The updated traffic analysis has concluded that traffic impacts resulting from the Modified Project would be less than significant on a project specific and cumulative level and would not substantially increase the severity of the traffic impacts as previously disclosed in the 2005 MND. An updated correspondence of approval from LADOT dated December 12, 2015 is also included in Attachment B to this Addendum.
- The air quality and greenhouse gas emissions analyses has been revised to account for the delay in the project schedule (the prior analysis anticipated construction would begin in January of 2016), increases the volume of soil export to account for a potential fourth level of subterranean parking), and includes localized significance thresholds.
- An updated related projects list has been incorporated into the cumulative analysis to account for recently proposed projects in the project vicinity.

No new impacts will be created by the Proposed Project. The mitigation measures identified under ENV-2005-1674-MND serve to mitigate any potential impacts from the Proposed Project.

PROJECT BACKGROUND

Approved Project (Case No. ZA 2005-1673-ZV-ZAA-SPR-PA1, VTT 62367)

Through previous actions from 2005 through 2006, the City of Los Angeles approved the development of 629 joint live/work condominium residential units and 27,000 square feet of ground floor retail, for a total of 750,910 square feet on three lots, connected by a central six-story parking structure (three stories above grade) with a rooftop courtyard/terrace area (the "Approved Project"). In connection with its initial approval of the Approved Project, the City of Los Angeles adopted Mitigated Negative Declaration ENV-2005-1674-MND (the "2005 MND").

As depicted in Figure 8, Exhibit "A", the Approved Project authorized three main buildings including: a 28-story (approximately 312 feet four inches in height) multi-family residential building with 271 residential units and 4,701 square feet of ground-floor retail space along Figueroa Street (Tower 1/Lot 2); a 28-story multi-family residential building with 281 residential units and 4,785 square feet of ground-floor retail space along 9th Street, and a three-story 6,902 square feet retail building (Tower 2/Lot 3); a six-story loft-style residential building with 77 residential units and 6,575 square feet of ground floor retail space along Flower Street (the Lofts Building/Lot 1) and a central parking podium (three levels above grade, three levels below grade) with a rooftop open space area. The Approved Project was to be built in phases. Phase I of Recorded Tract 62367 (referred to as "Apex I") has already been constructed and includes Tower 1 (271 DUs and 4,701 square feet of retail) and the Loft Building (77 DUs and

6,575 square feet of retail). Table 1, below provides a summary of the Approved Project, detailing the extent of approved commercial and residential development for Lots 1, 2 and 3.

Table 1
Summary of Approved Project

Development	Pre-Dedicated Lot Area (square feet)	Total Floor Area (square feet)	Retail Floor Area (square feet) [a]	Dwelling Units
Phase 1				
Lot 1 (Lofts Building)	22,736	96,926	6,575	77
Lot 2 (Tower 1)	39,089	315,886	4,701	271
Phase 2				
Lot 3 (Tower 2)	39,129	338,098	15,724	274
Total	**100,954**	**750,910 (7.44 FAR)**	**27,000**	**629**

Notes
[a] *The Approved Project allows for the development of 27,000 square feet of retail development, but did not specify how much retail floor area would be developed on each lot. This table reflects the amount of floor area developed on Lots 1 and 2, with the remaining balance allocated to Lot 3.*
Source: ZA-2005-1673-ZV-ZAA-SPR-PA1.

PROPOSED PROJECT

The Applicant is requesting approval of a modification of Recorded Tract 62367, a Plan Approval of ZA-2005-1673-ZV-ZAA-SPR and Site Plan Review to develop the remaining phase of Recorded Tract 62367 with 60 additional dwelling units and less retail square footage than previously approved (the "Proposed Project"). Los Angeles Municipal Code Section 17.14 governs the procedures and criteria for approving modifications to final tract maps. Increases in the residential density of previously approved tract maps of up 10 percent may be authorized by the City of Los Angeles pursuant to Los Angeles Municipal Code Section 17.14.E. The Proposed Project proposes to increase the overall number of units in the Apex project by 9.5 percent (from 629 units to 689 units). The Proposed Project would not substantially modify the previously approved height or massing of the 28-story building ("Phase II Tower") previously approved as part of the Approved Project, which would now be comprised of 341 residential units, 11,687 square feet of ground floor retail space, 13,535 square feet of open space for a total of approximately 338,098 square feet of developed floor area. The retail space would be provided on the ground floor of the tower building and in a stand-alone retail structure at the corner of 9th Street and Figueroa Street. The Proposed Project would require a total of 438 parking spaces, including 426 residential parking spaces and 12 commercial parking spaces. Parking would be provided in a three-level below grade parking structure consistent with the approved plans. As compared to the Approved Project, the Proposed Project would not increase total floor area.

The height of the proposed residential tower is 312 feet and six inches (312' - 6") above grade to the top of the parapet and the retail building will be a maximum of 45 feet above grade. The height of the building is essentially the same as the Approved Project, which had a reference building height of 312 feet above grade as measured to the

top of the highest finished floor (excluding the rooftop equipment and parapet). The location and orientation of the proposed tower and retail building footprints have not changed and are in the same location as identified on the approved Site Plan.

The proposed Plot Plan is shown in Figure 9. Elevations are depicted in Figure 10 and Figure 11. In addition, architectural axons of the Proposed Project are shown in Figures 12 through 14. Provided below in Table 2 is a summary table of the Proposed Project with a comparison to the project data for the 2005 MND for the Approved Project.

Table 2
Summary of Proposed Project and Net Change from Approved Project

Development	Pre-Dedicated Lot Area (square feet)	Total Floor Area (square feet)	Retail Floor Area (square feet) [a]	Dwelling Units
Lot 1 (Lofts Building)	22,736	96,926	6,575	77
Lot 2 (Tower 1)	39,089	315,886	4,701	271
Lot 3 (Tower 2)	39,129	338,098	11,687	341
Total	**100,954**	**750,910 (7.44 FAR)**	**22,963**	**689**
Net Change from Approved Project	**0**	**0**	**-4,037**	**+ 60**

Source: Preston Architects and Holland partner Group, 2014.

Open Space

ZA-2005-1673-ZV-ZAA-SPR authorized the project to provide 39,208 square feet of common open space in light of the desirability of the project's maximizing ground floor retail space, the cost of property in the South Park Area of Downtown and the project's proximity to such open space and recreational features as Grand Hope Park, L.A. Live, Gilbert Lindsay Plaza, and Pershing Square, as well as the fact that existing buildings located in the same zone and vicinity being converted to residential uses under the Adaptive Reuse Ordinance are not required to comply with open space requirements. As part of the initial phases of the Approved Project's development all of the open space required by ZA-2005-1673-ZV-ZAA-SPR for the entirety of the Approved Project has been provided through the existing pool deck, mid-block paseo, Urban Park and fitness room. The Apex II project proposes to increase the overall number of units in the Apex project by 9.5%. The proposed Apex II project will also add 13,535 square feet of common open space to the project, thus increasing total common open space by approximately 34% from the amount required by ZA-2005-1673-ZV-ZAA-SPR, for a total requirement of 52,743 square feet of common open space. Such additional open space will be provided by a 4,049 square foot rooftop deck with fire pit, two residential lounges, a 1,959 square foot indoor amenity space, and 5,300 square feet of private open space with residential balconies.

ENVIRONMENTAL SETTING

To determine whether any substantial changes have occurred to the Project Site and/or surrounding project area, a survey of the Project Site was conducted on November 19, 2014. A follow up survey was conducted in December 2015 to verify that the conditions and photographs described herein are representative of current conditions at the time of this updated analysis. Comparative photographs of the Project Site and surrounding properties were taken from generally the same vantage points as depicted in the 2005 MND to document any changes to the existing conditions. As shown in Figure 3 through Figure 7, the Phase II portion of the Project Site remains in use as a surface parking lot and is unchanged from its prior documented condition in 2005. The Phase I portion of the Project Site have been developed which includes Tower I, the Lofts Building and a central parking podium with rooftop open space (See Figure 3, View 1, Figure 5, Views 7 and 8, and Figure 6, View 12). In addition to changes on the southern portion of the Project Site, several new developments have been constructed in the surrounding area since the 2005 MND was prepared, which include: the 35-story WaterMarke Tower, located north of the Project Site across 9th Street (See Figure 3, View 3), constructed in 2009; and the seven-story 9th and Flower mixed-use building located on the northeast corner of the intersection of 9th Street and Flower Street (See Figure 4, View 4), which was constructed in 2007.

With respect to changes to the physical environment, several development projects have been completed on and around the Project Site since 2005. The extent of new development surrounding the Project Site is also consistent with the cumulative analysis that was presented in the MND.

With respect to changes to the regulatory environment, environmental checklist questions pertaining to Forested Areas and Greenhouse Gas Emissions have been added to the State CEQA Guidelines. As a result, the City's standard MND form has been amended to address these concerns. Both of these issues are addressed in the revised environmental analysis below. In addition, several regulatory changes have occurred either citywide or within the Project area since the date the project was approved. The Greater Downtown Housing Incentive Area came into effect in 2007. The Figueroa and Olympic Supplemental Use District for Signage came into effect in 2012. The Los Angeles Sports and Entertainment District (LASED) was amended in 2007 and 2010. The Los Angeles Citywide Bike Ordinance became effective in 2013. The City of Los Angeles Green Building Code (Ordinance No. 181480) was adopted in December 2010. The Mobility Element was adopted in May 2015. To the extent these policies, plans or regulations affect the Proposed Project, such changes are discussed in the respective sections of the analysis presented herein. Where changes to mitigation measures are proposed, such changes are shown in redline-strikeout text followed by an explanation of why the change is being requested.

Senate Bill 743 - Environmental Quality: Transit Oriented Infill Projects

In 2013, the State of California enacted Senate Bill 743 (SB 743),[1] which provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." Public Resources Code Section 21099 defines a "transit priority area" as an area within one-half mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." Public

[1] *SB 743 is codified as Public Resources Code Section 21099.*

Resources Code Section 21064.3 defines "Major Transit Stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Public Resources Code Section 21061.3 defines an "Infill Site" as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. This state law supersedes the aesthetic impact thresholds of significance that were previously adopted in the L.A. CEQA Thresholds Guide (2006).

The 9th and Flower Project Site is an Infill site within a Transit Priority Area as defined by CEQA. It is located within ½ mile of two existing rail transit stations, the 7th Street Metro rail transit station, and the Pershing Square Metro rail transit station. The Project Site is also located within ½ mile of numerous bus routes with peak commute service intervals of 15 minutes or less. Accordingly, the Project's aesthetic impacts shall not be considered significant impacts on the environment pursuant to Public Resources Code Section 21099. While Section 21009 prohibits aesthetic impacts from being considered significant environmental impacts pursuant to CEQA, it does not affect the ability of the City of Los Angeles to implement design review through its ordinances or other discretionary powers.

ENVIRONMENTAL IMPACTS

(A brief explanation of all answers is required except "No Impact" answers that are adequately supported by the information sources cited.)

I. AESTHETICS. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway?	☐	☐	■	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	■	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	■	☐

The 2005 MND found that the Project's aesthetic impacts upon the views would be less than significant with mitigation. The Project Site is located in the downtown area of the City of Los Angeles. Views in the vicinity of the Project Site are largely constrained by adjacent mid- to high-rise structures and the area's relatively flat topography. There are no unique scenic vistas currently available from public vantage points in the immediate project vicinity and the Project Site is not located in the vicinity of a State-designated scenic highway or City-designated Scenic Highway. Mitigation measures I-1 through I-3, listed below, were adopted to mitigate any aesthetic impacts related to the general upkeep and landscaping of the property, signage, outdoor lighting and light and glare. The originally Approved Project included two 28-story multi-family residential buildings and a six-story loft-style residential building on three lots. The Approved Project would consist of a total of 629 residential units and 27,000 square feet of residential for a total of 750,910 square feet of development. Tower 1 (Lot 2) would include with 271 residential units and 4,701 square feet of ground-floor retail space along Figueroa Street. Tower 2 (Lot 3) would include 281 residential units and 4,785 square feet of ground-floor retail space along 9th Street, and a three-story 6,902 square feet retail building. The Lofts Building (Lot 1) would include 77 residential units and 6,575 square feet of ground floor retail space along Flower Street. Impacts associated with shade and shadows were found to be less than significant.

The Proposed Project would not modify the proposed scale and massing of the Approved Project. The Proposed Project includes 60 more residential units above the 629 residential units allowed under the Approved Project; however, the Proposed Project remains consistent with the allowable FAR and building height permitted on the Project Site. As such visual impacts would remain less than significant, as no new view obstructions would be created. Shade and shadow impacts under the Proposed Project would remain less than significant. Mitigation measures I-1 through I-3 which were adopted in conjunction with the initial project approval for VTT-62367-M1 would still apply to the Proposed Project. Subsequent to the 2005 MND being adopted, the Figueroa and Olympic Sign District (CPC-2007-842-SN) was adopted setting forth specific signage regulations for the block bounded by

Figueroa Street to the west, 9th Street to the north, Flower Street to the east and Olympic Boulevard to the south. As such, the Proposed Project's signage would be regulated by the provisions set forth in the Figueroa and Olympic Sign District. With adherence to the regulations set forth in the Figueroa and Olympic Sign District SUD, impacts associated with aesthetics and light and glare would be reduced to a less than significant level. Furthermore, as discussed above, pursuant to Public Resources Code Section 21099, aesthetic impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. Therefore, no new impacts would be created and no increases to the severity of any previously disclosed impacts would occur.

Mitigation Measures:

I-1 The owners shall promptly remove any graffiti from the wall, pursuant to LAMC Sections 91.801-F, 91.8904-1, and 91.1707-E.

I-2 Outdoor lighting shall be designed and installed with shielding, so that the light source cannot be seen from adjacent residential properties.

I-3 The exterior of the proposed buildings shall be constructed of materials such as high-performance ~~tinted~~ non-reflective glass and pre-cast concrete fabricated wall surfaces.

I-4 a. On-site signs are limited to the maximum allowable under the Code.

b. Multiple temporary signs in the store windows and along the building walls are not permitted.

II. AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest Range and Assessment Project and Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict the existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	■

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526, or timberland zoned Timberland Production (as defined by Government Code section 51104 (g)?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	■

As stated in the 2005 MND, the Project Site is located in the heavily developed area of Los Angeles and does not include any State-designated agricultural lands, is not zoned for agricultural use, and is not subject to a Williamson Act contract. Therefore, no impact on farmland or agricultural resources would occur. In 2009, the State CEQA Guidelines were amended to address the loss or conversion of forested lands to other non-forested uses. The Project Site is located in a developed urban city area, is improved with a surface parking lot, and does not support any forested areas. As such, the Project would have no impact on forested areas.

Mitigation Measures:

No potentially significant environmental impacts were identified for this issue area. Therefore, no mitigation measures are necessary.

III. AIR QUALITY. Where applicable, the significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project result in:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan or Congestion Management Plan?	☐	☐	☐	■
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	■	☐	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	■	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

The 2005 MND analyzed the construction and operational impacts of the Approved Project. The construction air

quality emissions were found to be less than significant with implementation of mitigation measures III-1 through III-3. Operational air quality impacts were found to be less than significant with implementation of mitigation measures III-4 through III-10.

The air quality analysis in the 2005 MND was based on the excavation of approximately 152,137 cubic yards of excavation for Phase I, which included excavating approximately 1.62 acres of the 2.3-acre Project Site to a depth of 42 feet below grade. Consistent with the assumptions identified in the 2005 MND, the excavation of the subterranean parking structure for Phase II would include roughly one-quarter of the grading that occurred during Phase I. Thus, the maximum daily construction emission levels were reported for Phase 1 to represent the highest possible emissions on a daily basis. The grading and earthwork emissions for Phase II would be approximately one-quarter of what occurred during Phase I, and as such, would be well below the impacts reported in the MND. The building construction impacts for the Phase II Tower would be similar to those reported in the MND as the size of the building would be slightly below the total FAR that was approved. The Proposed Project would require excavation to a depth of approximately 30 feet below existing grade at the Project Site to construct a three level subterranean parking structure. To verify that construction emission levels for the Proposed Project would be reduced as compared to the analysis presented in the 2005 MND, the construction emissions for the proposed Phase II Project were estimated using CalEEMod (Version 2013.2.2).[2] As shown in Table 3 below, the construction emissions for the Proposed Project would be reduced as compared to the values reported in the 2005 MND and construction impacts would continue to be less than significant.

Table 3
Estimated Peak Daily Construction Emissions

Emission Source	ROG	NO_x	CO	SO2	PM_{10}	$PM_{2.5}$
Site Preparation	1.49	15.43	9.02	0	1.09	0.84
Grading	2.37	25.68	20.47	0.04	2.20	1.46
Building Construction	5.67	31.01	66.08	0.13	9.63	3.38
Architectural Coating	21.44	2.64	8.39	0.02	1.66	0.56
Paving	0.81	7.84	6.48	0.00	0.58	0.47
SCAQMD Thresholds	**100**	**100**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Estimated Peak Daily Construction Emissions as Reported in the 2005 MND	61.61	93.99	82.72	0.48	10.3	NA
Note: Calculations assume compliance with SCAQMD Rule 403 – Fugitive Dust. Calculation sheets are provided in Attachment A to this Addendum.						

It should be noted that the construction-related mitigation measures that were adopted with the 2005 MND (restated below) would still apply under the Approved Project. Therefore the values presented in Table 3, above

[2] *Construction and operational air quality emissions in the 2005 MND were analyzed using the URBEMIS air quality model, which was industry standard at that time. The air quality emissions for the Proposed Project are based on the CalEEMod software model, which is now recommended by CARB as a successor program to URBEMIS.*

reflect the "with mitigation" scenario in the CalEEMod worksheets in Attachment A. For comparative purposes the peak daily emissions as reported in the 2005 MND are displayed in Table 3. As shown, the peak daily emissions (with mitigation) for the Modified Project would be lower than previously reported for all criteria pollutants.

On an operational level, the Proposed Project includes 60 more residential units and 4,037 less retail square footage than previously approved for the Approved Project. As noted in response to Checklist Question XVI, the Proposed Project would result in 74 additional daily trips. As compared to the 2,624 daily trips that were projected to be generated by the Approved Project, the Proposed Project would result in an approximate 2.8 percent increase in the daily trips. The Proposed Project's operational emissions were calculated using the CalEEMod computer software to evaluate the entire project as modified. As shown on Table 4, the Proposed project's operational emissions would still fall below the significance thresholds and no new impacts would be created. It should be noted that the operational-related mitigation measures that were adopted with the 2005 MND (restated below) would still apply under the Approved Project. In addition, the mitigation scenario shown in the CalEEMod worksheets represents compliance with regulatory measures as mandated by the City of Los Angeles Green Building Ordinance. Therefore, the values presented in Table 4 below reflect the "with mitigation" scenario in the CalEEMod worksheets in Attachment A.

Table 4
Existing Daily Operational Emissions from the Project Site

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Summertime (Smog Season) Emissions						
Area Source	28.79	0.67	57.35	<0.00	0.31	0.31
Energy (Natural Gas)	0.35	3.00	1.28	0.02	0.20	0.20
Mobile (Vehicles)	17.51	42.24	175.86	0.59	30.82	8.64
Total Emissions	***46.55***	***45.91***	***134.49***	***0.61***	***31.33***	***9.15***
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Potentially Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Wintertime (Non-Smog Season) Emissions						
Area Source	28.79	0.67	57.35	<0.01	0.31	0.31
Energy (Natural Gas)	0.29	2.51	1.07	0.02	0.20	0.20
Mobile (Vehicles)	18.16	44.30	177.11	0.43	30.82	8.65
Total Emissions	***47.24***	***47.48***	***235.53***	***0.46***	***31.33***	***9.16***
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Potentially Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum Daily Operational Emissions Reported in the 2005 MND	45.16	26.63	230.17	0.13	19.15	NA

Calculation data are provided in Appendix A to this Draft IS/MND. Source: Parker Environmental Consultants.

For comparative purposes, the maximum daily operational emissions from the 2005 MND are shown in Table 4, above. As indicated, the Modified Project's operational emissions would be slightly higher for all five of the

criteria pollutants previously analyzed (PM2.5 was not modeled in the 2005 MND), however the emissions estimates remain below the thresholds of significance for all pollutants. Therefore, the Modified Project would not result in any new significant impacts and the increase in emissions would be considered less than significant.

Localized Significance Thresholds

Although it was not analyzed in the 2005 MND, the SCAQMD has developed localized significance thresholds (LSTs) that are based on the amount of pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts. These localized thresholds, which are found in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by the SCAQMD, apply to projects that are less than or equal to five acres in size and are only applicable to the following criteria pollutants: NOx, CO, PM10, and PM2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standards, and are developed based on the ambient concentrations of that pollutant for each SRA. For PM10, the LSTs were derived based on requirements in SCAQMD Rule 403 — Fugitive Dust. For PM2.5, the LSTs were derived based on a general ratio of PM2.5 to PM10 for both fugitive dust and combustion emissions.

The Project Site is located within SRA 1, which covers the Central Los Angeles area. The nearest sensitive receptors that could potentially be subject to localized air quality impacts associated with construction of the Proposed Project include multi-family residences that were developed on the Project Site during Phase I. Given the proximity of these sensitive receptors to the Project Site, the LSTs with receptors located within 25 meters (82.02 feet) are used to address the potential localized air quality impacts associated with the construction-related NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions for each construction phase. As impacts to sensitive receptors within 25 meters are less than significant, impacts to sensitive receptors located further than 25 meters would also be less than significantly impacted by localized emissions. As shown in Table 5, below, the Proposed Project's localized air quality emissions would be less than significant.

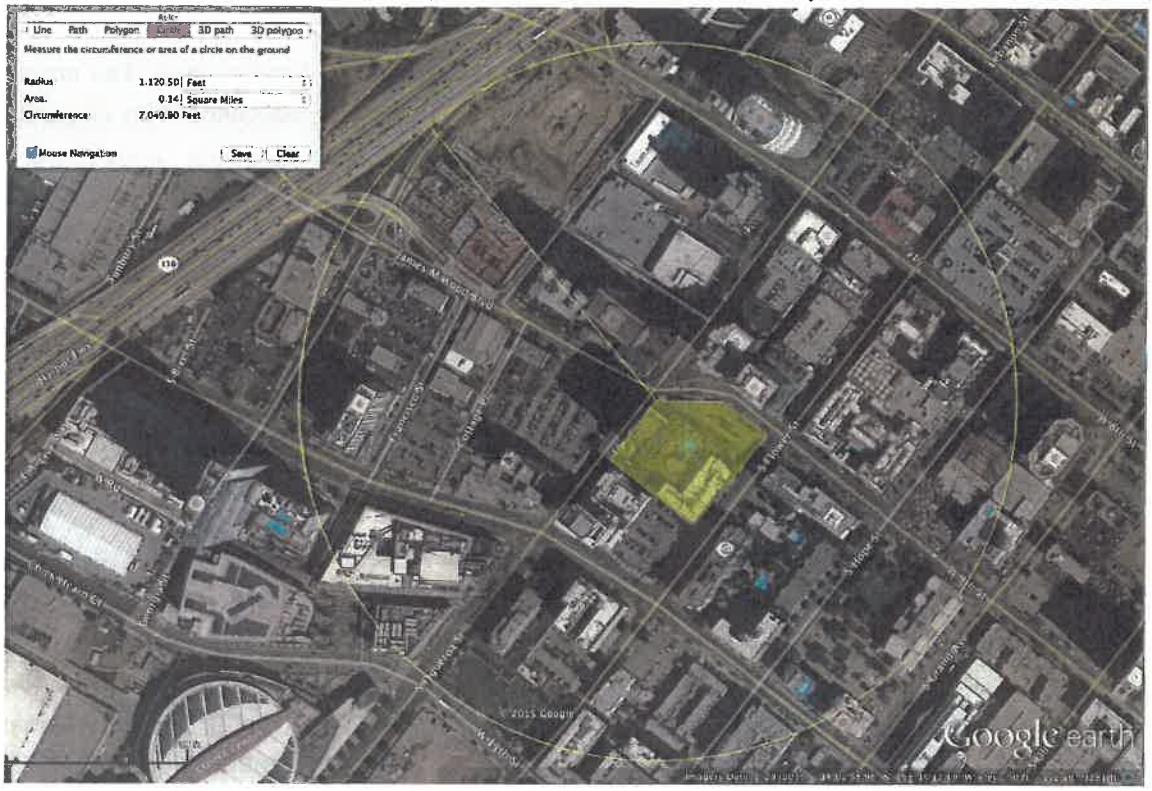
Zoning Information (ZI) No. 2427: Freeway Adjacent Advisory Notice For Sensitive Uses

ZI No. 2427 applies to all projects that are located within 1,000 feet of a freeway and require a discretionary action for which the City Planning Commission is the initial decision-maker or the decision-maker on appeal. Specifically, ZI No. 2427 applies to the following types of discretionary applications: Conditional Use Permits granted by the CPC (LAMC Sec. 12.24 U), Density Bonus (LAMC Sec. 12.22.A.25), Public, Quasi-Public Open Space Land Use Categories (LAMC Sec. 12.24.1), Zone Change (LAMC Sec. 12.32), General Plan Amendment (LAMC Sec. 11.5.6), Major Project Review/CUP (LAMC Sec. 12.24.U.14), Tentative Tract Map (LAMC Sec. 17.06), and Preliminary Parcel Maps (LAMC Sec. 17.50). The Proposed Project includes a request for a Modification to a Tract Map and is identified in the ZIMAS database as being subject to the Freeway Adjacent Advisory Notice.

The Freeway Adjacent Advisory Notice is not a prohibition or moratorium on new development near freeways. It is advisory only and serves as an early notification to applicants of discretionary projects who may not otherwise

be aware of the potential impacts on future building occupants of siting a building near a freeway. The Proposed Project was approved in 2005, approximately seven years prior the date the Advisory Notice came into effect. Notwithstanding this new information, the Proposed Project is consistent with the recommendations of ZI 2427 in that the Project Site is located more than 1,000 feet from the 101 Freeway. ZI 2427 advises applicants of the potential health risks associated with locating sensitive land uses (i.e., residential dwellings) within close proximity to freeways and recommends reducing occupants exposure through site design (such as locating open space areas as far as possible from the freeway source, minimizing the installation of operable windows for units facing the freeway, and increasing vegetation) and requires enhanced air filtration units (i.e., MERV 11) be installed for any units within 1,000 feet of the freeway. As shown in the exhibit below, the 101 Freeway is approximately 1,120 feet from the Phase 2 development footprint. The 2005 MND included Mitigation Measure III-10, which requires the Project Applicant to install air filtration systems to reduce the effects of diminished air quality upon the occupants of the Proposed Project. As such, the Modified Project in in substantial conformance with the ZI 2427 policy and land use consistency impacts would be considered less than significant.

Figure 1, Project Site Boundaries with a 1,120 Foot Radius
Showing the Distance to the 110 Freeway



Mitigation Measures:

Construction

III-1 All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD District Rule 403.

III-2 The construction area shall be kept sufficiently dampened to control dust caused by grading and hauling. Reasonable control of dust caused by wind shall be provided at all times.

III-3 All loads shall be secured by trimming, watering, or other appropriate means to prevent spillage and dust.

Table III-5
Localized On-Site Peak Daily Construction Emissions

Construction Phase [a]	Total On-site Emissions (Pounds per Day)			
	NO_x [b]	CO	PM_{10}	$PM_{2.5}$
Site Preparation	13.63	7.34	0.9	0.77
Grading	15.67	12.13	1.33	1.13
Building Construction	14.44	8.83	0.97	0.89
Architectural Coatings	2.01	1.85	0.15	0.15
Paving Phase	7.79	6.43	0.47	0.44
SCAQMD Localized Thresholds [c]	**74**	**680**	**5**	**3**
Potentially Significant Impact?	*No*	*No*	*No*	*No*

[a] *The localized thresholds for all phases are based on a receptor within a distance of 82 feet (25 meters) in SCAQMD's SRA 1 for a Project Site of 1 acres.*
[b] *The localized thresholds listed for NO_x takes into consideration the gradual conversion of NO_x to NO_2, and are provided in the mass rate look-up tables in the SCAQMD's "Final Localized Significance Threshold Methodology" guidance document. The analysis of localized air quality impacts associated with NO_x emissions is focused on NO_2 levels as they are associated with adverse health effects.*
Source: CalEEMod 2013.2.2, Calculation sheets are provided in Appendix A to this IS/MND.

III-4 All materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amount of dust.

III-5 All clearing, grading, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of dust.

III-6 Construction equipment shall be maintained and operated so as to minimize exhaust emissions.

III-7 Apply soil stabilizers to non-active areas.

III-8 All construction contractors shall comply with SCAQMD regulations, including Rule 1113, which regulates the use of architectural coatings. To the maximum extent feasible, the project contractors shall use low to zero-VOC content architectural coating materials.

III-9 Employ the use of cooled exhaust gas recirculation technology in construction equipment.

Operation

III-10 The Project Applicant shall install air filtration systems to reduce the effects of diminished air quality upon the occupants of the Proposed Project.

IV. **BIOLOGICAL RESOURCES.** Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	■
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	■
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	■
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	■
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	☐	☐	☐	■
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

As disclosed in the 2005 MND, the Project Site and the surrounding area is fully developed with urban infrastructure and does not contain any significant areas of natural open space or areas of significant biological

resource value. The Project Site is currently entirely paved and is occupied with a commercial surface parking lot. No candidate, sensitive, or special status species identified in local plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS) were found or are expected to occur on the Project Site. Therefore, the Proposed Project would have no impact on any sensitive species or habitat.

As discussed previously and shown in Figure 3 through Figure 7, Views of the Project Site and Surrounding Land Uses, the Project Site remains relatively unchanged since 2005. The proposed changes to the project would not affect the conclusions of the 2005 MND.

Mitigation Measures:

No potentially significant environmental impacts were identified for this issue area. Therefore, no mitigation measures are necessary.

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5?	☐	☐	■	☐
b. Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA §15064.5?	☐	☐	■	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	■	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

As discussed in the 2005 MND, there are no National Register or California State Historic Resource sites located on the Project Site. The Project Site is not designated a City of Los Angeles Historic-Cultural Monument. Completed Phase I of the Project is located adjacent to the historic Friday Morning Club (also known as the Varsity Arts Center), located at 940 S. Figueroa Street. The Variety Arts Center is a five-story building listed on the National Register of Historic Places and the California Register of Historic Places, and designated a City of Los Angeles Historic-Cultural Monument. Aesthetic impacts of the Approved Project on the Variety Arts Center were previously determined to be less than significant.

The Proposed Project would not have any new impact upon the Variety Arts Center as height and massing of the Phase II Tower remains unchanged. With respect to potential impacts upon archaeological and /or paleontological resources, the potential for impacts to occur would be the same, or slightly reduced as compared to the MND conclusion. The Approved Project assumed an excavation depth of 41 feet for the construction of four levels of subterranean parking. The Proposed Project would require excavation to a depth of approximately 30 feet below

existing grade at the Project Site to construct a three-level subterranean parking structure. With regard to the potential to impact any archaeological or paleontological resources, the 2005 MND included mitigation measures to reduce potential impacts related to the discovery of unknown archaeological or paleontological resources to a less-than-significant level (see V-1 and V-2). These mitigation measures (restated below) would still apply to the Proposed Project. As such, the potential for impacts upon archaeological or paleontological resources would remain less than significant.

Mitigation Measures:

V-1 If any archaeological materials are encountered during the course of the project development, the project shall be halted. The services of an archaeologist shall be secured by contacting the Center for Public Archaeology – Cal State University Northridge, or a member of the Society of Professional Archaeologists SOPA) or a SOPA-qualified archaeologist to assess the resources and evaluate the impact. Copies of the archaeological survey, study, or report shall be submitted to the UCLA Archaeological Information Center. A covenant and agreement shall be recorded prior to obtaining a grading permit.

V-2 If any paleontological materials are encountered during the course of the project development, the project shall be halted. The services of an paleontologist shall be secured by contacting the Center for Public Paleontology – USC, UCLA, Cal State Los Angeles, Cal State Long Beach, or the County Museum to assess the resources and evaluate the impact. Copies of the paleontological survey, study, or report shall be submitted to the Los Angeles County Natural History Museum. A covenant and agreement shall be recorded prior to obtaining a grading permit.

VI. GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving :				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	■	☐
ii. Strong seismic ground shaking?	☐	■	☐	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	■
iv. Landslides?	☐	☐	☐	■
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potential result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	■	☐	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	■	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	■

The 2005 MND analyzed the potential for the project to result in significant impacts associated with seismicity, landslides, erosion, loss of topsoil, and liquefaction and found that geotechnical hazards would be mitigated to a level of less than significance with the incorporation of mitigation measures VI-1 through VI-3. The Approved Project was conditionally approved to comply with several standard safety conditions imposed by the Department of Building and Safety. The Proposed Project would be required to adhere to all mitigation measures as noted in the earlier approvals (restated below). Therefore, no new impacts would occur and no additional mitigation measures are required.

Mitigation Measures:

VI-1 The design and construction of the Proposed Project shall conform to the Uniform Building Code seismic standards as approved by the Department of Building and Safety.

VI-2 The Proposed Project shall comply with the geotechnical engineering recommendations identified in the Preliminary Geotechnical Report, Proposed Development at the Intersection of 9th Street and Figueroa Street, Los Angeles, California, prepared by GeoPenTech, Inc., November 2004.

VI-3 Prior to the issuance of building or grading permits, the Project Applicant shall submit a geotechnical report prepared by a registered civil engineer or certified engineering geologist to the Department of Building and Safety for approval.

VII. GREENHOUSE GAS EMISSIONS Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact upon the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	■	☐

The issue of greenhouse gas emissions was not evaluated within the 2005 MND. The State CEQA Guidelines were

amended after the MND was published to require lead agencies to determine a project's potential to generate greenhouse gas emissions and thus contribute to global climate change. Because no analysis of greenhouse gases was presented in the 2005 MND, the following analysis is added to address change in regulatory environment.

Response a: Less Than Significant Impact. A significant impact would occur if the Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Greenhouse gas (GHG) emissions refer to a group of emissions that have the potential to trap heat in the atmosphere and consequently affect global climate conditions. The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H_2O). CO_2 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e).

There are currently no adopted thresholds or guidance adopted by the SCAQMD or other agencies in California to assess the significance of potential impacts associated with GHGs. Section 15064.4 of the CEQA Guidelines provides direction to lead agencies in determining the significance of the impacts of GHGs, however, it does not establish a specific threshold of significant. Since neither the SCAQMD nor the City of Los Angeles have adopted quantitative thresholds of significance for a residential project's generation of greenhouse gas emissions, the following analysis is based on a combination of the requirements outlined in the CEQA Guidelines. As required in Section 15604.4 of the CEQA Guidelines, this analysis includes an impact determination based on the following: (1) an estimate of the amount of greenhouse gas emissions resulting from the Proposed Project; (2) a qualitative analysis or performance based standards; (3) a quantification of the extent to which the Proposed Project increases greenhouse gas emissions as compared to the existing environmental setting; and (4) the extent to which the Proposed Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the purposes of reducing greenhouse gas emissions.

Construction

Construction of the Proposed Project would emit GHG emissions through the combustion of fossil fuels by heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the Project Site. These impacts would vary day to day over the approximate 30-month duration of construction activities.

Emissions of GHGs were calculated for each year of construction of the Proposed Project and the results of this analysis are presented in Table 6, Project Construction-Related Greenhouse Gas Emissions. As shown in Table 6, below, the total GHG emissions from construction activities related to the Proposed Project would be 2,530 metric tons with the greatest annual emissions of 1,347 metric tons occurring in 2017.

Table 6
Project Construction-Related Greenhouse Gas Emissions

Year	CO_2e Emissions (Metric Tons per Year) [a]
2016	895
2017	1,374
2018	261
Total Construction GHG Emissions	**2,530**

[a] *Construction CO_2 values were derived using CalEEMod Version 2013.2.2 Calculation data and results are provided in Appendix A, Air Quality and Greenhouse Gas Emissions CalEEMod Worksheets.*

Operation

Baseline GHG Emissions

The Project Site is currently improved with a surface parking lot that provides general parking for other land uses in the surrounding area. The vehicle trips associated with the vehicles that park on-site are not generated by on-site land uses and would occur even if the Project Site were to cease operations as a surface parking lot. As such, the baseline GHG emissions for the existing uses are assumed to be zero.

Project Operational GHG Emissions

The GHG emissions resulting from operation of the Proposed Project, which involves the usage of on-road mobile vehicles, electricity, natural gas, water, landscape equipment and generation of solid waste and wastewater, were calculated under two separate scenarios in order to illustrate the effectiveness of the Project's compliance with the *CALGREEN Code* and other mitigating features that would be effective in reducing GHG emissions, such as the site being an infill lot, its proximity to transit and walking distance to a major employment center.

CALGREEN Code

In recent years, California has taken the lead in promoting "green" building ordinances. These measures can increase energy efficiency, reduce greenhouse gas emissions, and decrease other harmful environmental impacts. Numerous local governments in California have implemented such measures, and in 2010, the State adopted the nation's first statewide green building standard. The statewide code, known as CALGREEN Code, applies to all new buildings constructed after January 1, 2011, and requires that they be built using environmentally advanced construction practices. The Code updates Title 24 of the California Code of Regulations, also known as the California Building Standards Code. In addition to setting mandatory requirements, the Code includes more stringent optional provisions permitting developers to meet heightened standards, known as Tier 1 and Tier 2. CALGREEN Code § A4.6 (residential) and §A5.6 (nonresidential) include detailed criteria for meeting these tiers. Cities at their discretion may adopt Tier 1 or Tier 2 as mandatory or adopt and enforce other standards that are

more stringent than the CALGREEN Code. The CALGREEN Code includes the following requirements for residential projects:

	Mandatory Requirements	Voluntary Standards
Indoor Water Use Reduction	20%	30%; 35%; 40%
Water Meters	Separate for non-residential indoor and outdoor use	
Diversion of Construction Waste From Landfills	50%	Residential: 65% (Tier 1); 75% (Tier 2) Non-Residential: 65% (Tier 1): 80% (Tier 2)
Mandatory Inspection of Energy Systems	Non-residential buildings over 10,000 square feet.	
Required Low-Pollutant Emitting Materials	Paint, carpet, vinyl flooring, and particle board.	80% VOC compliant resilient flooring (Tier 1); 90% resilient flooring (Tier 2)
Energy Efficiency		Exceed Title 24's 2008 Energy Efficiency Standard by 15% (Tier 1); Exceed Standard by 30% (Tier 2)

Green Building Code (Ordinance No. 181480, adopted December 15, 2010)

The City of Los Angeles *L.A. Green Building Code* (Ordinance No. 181480), which incorporates applicable provisions of the CALGreen Code, and in some cases outlines more stringent GHG reduction measures available to development projects in the City of Los Angeles is consistent with statewide goals and policies in place for the reduction of greenhouse gas emissions, including AB 32 and the corresponding Scoping Plan. Among the many GHG reduction measures outlined later in this Section, the *L.A. Green Building Code* requires projects to achieve a 20 percent reduction in potable water use and wastewater generation, meet and exceed Title 24 Standards adopted by the California Energy Commission on December 17, 2008, and meet 50 percent construction waste recycling levels. New development Projects are required to comply with the *L.A. Green Building Code,* and therefore are generally considered consistent with statewide GHG-reduction goals and policies, including AB 32.

Operational GHG Emissions

To quantify the Proposed Project's GHG Emissions and assess the Proposed Project's GHG reduction measures, Project emissions were estimated using CalEEMod (version 2013.2.2) for a base project without the enhanced energy conservation measures mandated by the CALGREEN Code *(i.e., pre-2005 Title 24 energy efficiency standards)* and with the mandatory efficiency standards to effectively estimate the Project's reduction in GHG emissions as compared to the base-case scenario for purposes of demonstrating the Proposed Project's consistency with AB32. Although the 2005 MND did not include an analysis of the project's GHG emissions, the following analysis evaluates the entire Project as modified with a total of 689 dwelling units. The Project's greenhouse gas emissions were generated under two scenarios: (a) Proposed Project Without GHG Reduction Measures and (b) Proposed Project With GHG Reduction Measures. The "With GHG Reduction Measures" scenario reflects the project's design features such as being an infill development with applicable trip credits for increased density, walkability, transit accessibility, proposing Energy Star rated appliances, dwelling units without fireplaces, and as otherwise required by code (i.e., compliance with Rule 403 (dust suppression), low VOC coatings, current Title 24 energy efficiency standards, implementing on-site solid waste recycling program).

As shown in Table 7, below, the net increase in GHG emissions generated by the Proposed Project under the Project Without GHG Reduction Measures would be 12,049 CO_2e MTY. The Project With GHG Reduction Measures scenario would result in a net increase of 9,601 CO_2e MTY above the current baseline of zero GHG emissions. For purposes comparing the Project's With GHG Reduction Measures to the Project Without GHG Reduction Measures scenario, the Project's operational features including installing energy efficient lighting, low flow plumbing fixtures, Energy Star-rated appliances, and implementing a construction and operational recycling program during the life of the project would reduce the Project's GHG emissions by approximately 14 percent. Furthermore, the Project is an infill development in a High Priority Transit Area and is within a major employment center. These project characteristics and corresponding GHG Reduction measures are consistent with state, regional and local plans and policies such as AB32, SB375, and SCAG's 2012-2035 RTP/SCS growth strategy, which have been adopted for the purposes of reducing greenhouse gas emissions.

Table 7
Project Operational Greenhouse Gas Emissions

Emissions Source	Estimated Project Generated CO_2e Emissions (Metric Tons per Year)		
	Project Without GHG Reduction Measures	Project With GHG Reduction Measures	Percent Reduction
Area	12	12	0%
Energy	4,010	3,432	14%
Waste	155	76	51%
Water	578	488	16%
Mobile (Motor Vehicles)	7210	5,509	24%
Construction Emissions [a]	84	84	0%
Project Total	**12,049**	**9,601**	**20%**

[a] The total construction GHG emissions were amortized over 30 years and added to the operation of the Project. Calculation data and results provided in Attachment A, Air Quality and Greenhouse Gas Emissions CalEEMod Worksheets.

In addition to the code-required GHG reduction benefits described above, the Proposed project is an infill development and is located in a High Quality Transit Priority area, which would reduce the Project's mobile source traffic emissions. As noted in Table 7, below, the Project's reduction in mobile source GHG emissions as a result of the project's proximity to transit and jobs is estimated to be 24 percent. Although it is not applicable for residential developments, for comparative purposes it is worth noting that the SCAQMD adopted a numeric threshold of significance of 10,000 CO_2e MTY for industrial projects. Therefore, the Project's generation of GHG emissions would not make a project-specific or cumulatively considerable contribution to conflicting with an applicable plan, policy or regulation for the purposes of reducing the emissions of greenhouse gases and, the Proposed Project's impact would be less than significant.

Response b: Less Than Significant Impact. The City of Los Angeles has begun to address the issue of global climate change by publishing Green LA, An Action Plan to Lead the Nation in Fighting Global Warming (the L.A. Green Plan). This document outlines the goals and actions the City has established to reduce the generation and emissions of greenhouse gases from both public and private activities. According to the L.A. Green Plan, the City is committed to the goal of reducing emissions of CO_2 to 35 percent below 1990 levels. To achieve this, the City

will:

- Increase the generation of renewable energy;
- Improve energy conservation and efficiency; and
- Change transportation and land use patterns to reduce dependence on automobiles.

The Proposed Project is located in the downtown area of the City of Los Angeles, is in close proximity to various modes of mass transit, and would provide residential uses in close proximity to employment opportunities in the downtown area. The Project Site is accessible to various MTA bus lines, the DASH service, and is located only two blocks south of the Los Angeles County Metro Rail system's 7th and Metro Blue Line Station (located at the corner of 7th Street and Flower Street). As such, the Proposed Project would be consistent with the strategies identified in the L.A. Green Plan, and the Project's potential impact on greenhouse gas emissions and climate change would be less than significant under the L.A. Green Plan. Furthermore, the project design would exhibit the applicable strategies and goals outlined in the 2006 CAT Report Strategies and ARB's Scoping Plan Recommended Measures for a project of this size and type. Accordingly, it is anticipated that the Proposed Project would be consistent with all feasible and applicable strategies to reduce greenhouse gas emissions in California. As such, the Proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases and the Proposed Project's impacts would be less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	■
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	■	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	■	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working	☐	☐	■	☐

in the area?				
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	■

The 2005 MND found that the residential and commercial/retail uses associated with the Approved Project would use minimal amounts of hazardous materials for routine cleaning and, as such, would not pose a substantial risk involving the routine transport, use, and disposal of hazardous materials. However, environmental impacts may result from the Proposed Project's implementation due to its location in an area of potential methane gas zone. Mitigation Measures VIII-1 through VIII-3, as identified in the 2005 MND (and restated below) would ensure that the site is developed in a manner that appropriately mitigates any hazards to less than significant levels. Therefore, no new impacts would occur.

Mitigation Measures:

VIII-1 All commercial, industrial, and institutional buildings shall be provided with an approved Methane Control System, which shall include these minimum requirements; a vent system and gas-detection system which shall be installed in the basements or the lowest floor level on grade, and within underfloor space of buildings with raised foundations. The gas-detection system shall be designed to automatically activate the vent system when an action level equal to 25% of the Lower Explosive Limit (LEL) methane concentration is detected within those areas.

VIII-2 All commercial, industrial, institutional and multiple residential buildings covering over 50,000 square feet of lot area or with more than one level of basement shall be independently analyzed by a qualified engineer, as defined in Section 91.7102 of the Municipal Code, hired by the building owner. The engineer shall investigate and recommend mitigation measures which will prevent or retard potential methane gas seepage into the building. In addition to the other items listed in this section, the owner shall implement the engineer's design recommendations subject to Department of Building and Safety and Fire Department approval.

VIII-3 All multiple residential buildings shall have adequate ventilation as defined in Section 91.7102 and the Municipal Code of a gas-detection system installed in the basement or on the lowest floor level on grade, and within the underfloor space in buildings with raised foundations.

IX. HYDROLOGY AND WATER QUALITY. Would the proposal result in:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☐	☐	■	☐
b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	☐	☐	☐	■
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	■
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site?	☐	☐	■	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	■	☐
f. Otherwise substantially degrade water quality?	☐	☐	☐	■
g. Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
h. Place within a 100-year flood plain structures which would impede or redirect flood flows?	☐	☐	☐	■
i. Expose people or structures to a significant risk of loss, inquiry or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	■
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■

The 2005 MND analyzed the Approved Project's construction and operational activities potential to result in adverse impacts with respect to surface water quality and water discharge into stormwater drainage systems and found that such impacts would be mitigated to acceptable levels below significance with compliance with the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts. Implementation of the standard water quality mitigation measures IX-1 through IX-3 for construction, and IX-4 through IX-12 for operation (and restated below), would continue to apply to the Proposed Project. Therefore, the

Proposed Project would not increase the severity of any previously disclosed impacts and impacts would remain less than significant after mitigation.

Mitigation Measures:

IX-1 Outlets of culverts, conduits, and channels shall be protected from erosion by discharge velocities by installing rock outlet protection. Rock outlet protection is a physical devise composed of rock, grouted riprap, or concrete rubble placed at the outlet of a pipe. Install sediment traps below the pipe-outlet. Inspect, repair and maintain the outlet protection after each significant rain.

IX-2 Appropriate erosion control and drainage devices shall be incorporated to the satisfaction of the Building and Safety Department, such as interceptor terraces, berms, vee-channels, and inlet and outlet structures, as specified by Section 91.7013 of the Building Code.

IX-3 The Project Applicant shall prepare and execute a covenant and agreement (Planning Department General form CP-6770) satisfactory to the Planning Department binding the owners to incorporate structural BMPs during the construction of the Proposed Project in accordance with the Standard Urban Stormwater Mitigation Plan and/or per manufacturer's instructions.

IX-4 The Project Applicant shall implement stormwater BMPs to retain or treat the runoff from a storm event producing 3.4 inches of rainfall in a 24 hour period. The design of structural BMPs shall be in accordance with the Development of Best Management Practices Handbook Part B Planning Activities. A signed certificate from a California licensed civil engineer or licensed architect that the proposed BMPs meet this numerical threshold standard shall be required.

IX-5 Post development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increase peak stormwater discharge rate will result in increased potential for downstream erosion.

IX-6 Development shall be concentrated or clustered on portions of the Project Site while leaving the remaining land in a natural undisturbed condition. Limit clearing and grading of native vegetation at the Project Site to the minimum needed to build lots, allow access, and provide fire protection. Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.

IX-7 Any connection to the sanitary sewer shall have authorization from the Bureau of Sanitation.

IX-8 Roof runoff systems shall be installed where suitable. Runoff from rooftops is relatively clean, can provide groundwater recharge and reduce excess runoff into storm drains.

IX- 9 All storm drain inlets and catch basins within the project area shall be stenciled with prohibitive language (i.e., NO DUMPING – DRAINS TO OCEAN) and/or graphical icons to discourage illegal dumping.

Prefabricated stencils can be obtained from the Department of Public Works, Stormwater Management Division. Legibility of stencils and signs must be maintained.

IX-10 Materials with the potential to contaminate stormwater shall be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar stormwater conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

IX-11 The storage area shall be paved and sufficiently impervious to contain leaks and spills. The storage area must have a roof or awning to minimize collection of stormwater within the secondary containment area.

IX-12 An efficient irrigation system shall be designed to minimize runoff, including: drip irrigation for shrubs to limit excessive spray; shutoff devices to prevent irrigation after significant precipitation; and flow reducers.

X. LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	■
b. Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	■	☐	☐
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

The Approved Project authorized the development of 629 residential units and 27,000 square feet of ground floor retail, for a total of 750,910 square feet of development. The permitted FAR for the entire Approved Project is 7.44:1.

Phase I of the Approved Project has already been completed. During Phase I, the central parking structure, Tower 1, and the six-story Lofts Building were constructed. Tower 1 is developed with 271 DUs and 4,701 square feet of ground floor retail space. The Loft Building consists of 77 DUs and 6,575 square feet of retail.

Los Angeles Municipal Code Section 17.14 governs the procedures and criteria for approving modifications to final tract maps. Increases in the residential density of previously approved tract maps of up to 10 percent may be authorized by the City of Los Angeles pursuant to LAMC Section 17.14.E. The Proposed Project proposes to increase the overall number of units in the Apex project by 9.5 percent (from 629 units to 689 units). The Proposed Project includes 60 more residential units and 4,037 less retail square footage than previously approved. The total floor area of the Project would remain unchanged. The height and massing of the Phase II Tower would remain unchanged. The Proposed Project would also include a minimum of 40 parking spaces (in addition to the 958 existing spaces built in Phase 1), and 347 long-term and 40 short bicycle parking spaces in a 3-level

subterranean parking garage. Based on a requirement of 1.25 spaces per unit, and 1 space per 1,000 square feet of retail space, the Revised Project would require total of 438 parking spaces (426 residential and 12 commercial). The Project's parking requirement would be met through a combination of surplus spaces provided in Phase I and within the 3-level subterranean parking garage below Tower 2.

Regulatory Changes

The Project Site is located within the Central City Community Planning Area, the Central Business District Redevelopment Project Area, and the City Center Redevelopment Project Area. In addition, the Project Site is located in the Downtown Adaptive Reuse Incentive Area. The portions of the Project Site that front Figueroa Street and 9th Street are zoned Commercial (C2-4D) with a corresponding Regional Center Commercial land use designation in the General Plan. The portion of the Project Site that fronts Flower Street is zoned Multiple Dwelling ([Q]R5-4D) with a corresponding High Density Residential land use designation in the General Plan. The Zoning and General Plan land use designations for the Project Site have not changed since the MND was adopted. However, there have been several Ordinances passed specifically aimed at stimulating development in downtown Los Angeles since the Approved Project was initially approved in 2005. They are discussed as follows:

Downtown Housing Ordinance *(Ordinance 179,076)*

In order to encourage more housing downtown, the City Council adopted the Downtown Housing Ordinance (DHO), effective September 23, 2007, establishing a Greater Downtown Housing Incentive Area. The incentives of the DHO are summarized below:

- Buildable area is the same as lot area.
- Unit density is no longer based on lot area. Density is now based on the amount of floor area within the project. (Note: the total floor area utilized by guest rooms cannot exceed the total floor are utilized by dwelling units.)
- Floor Area requirements for mixed-use developments with apartments and/or residential condominiums will not need to deduct any area lost to highway dedications or setbacks.
- The requirement for yard setbacks is waived (except under the Urban Design Guidelines).
- There is no prescribed percentage of the required open space that must be provided as either common open space or private open space.
- A Floor Area bonus has been established for developers who provide a percentage of units for low and moderate income housing within the development
- Workforce income housing is defined for the first time.

Balconies and Decks

Per ZA 2007-3430 (ZAI) balconies and decks are no longer considered floor area as long as they are:

- Project is built at an R3 density or greater;
- Not recessed but project beyond the perimeter of the building;

- Remain unenclosed except for the guard rails required by the Building Code;
- Qualify as Open Space pursuant to Section 12.21-G,2(b)(2) of the LAMC.

Green Building Code *(Ordinance No. 181480, adopted December 15, 2010)*

The City of Los Angeles *L.A. Green Building Code* (Ordinance No. 181480), which incorporates applicable provisions of the CALGreen Code, and in some cases outlines more stringent GHG reduction measures available to development projects in the City of Los Angeles is consistent with statewide goals and policies in place for the reduction of greenhouse gas emissions, including AB 32 and the corresponding Scoping Plan. Among the many GHG reduction measures outlined later in this Section, the *L.A. Green Building Code* requires projects to achieve a 20 percent reduction in potable water use and wastewater generation, meet and exceed Title 24 Standards adopted by the California Energy Commission on December 17, 2008, and meet 50 percent construction waste recycling levels. New development Projects are required to comply with the *L.A. Green Building Code,* and therefore are generally considered consistent with statewide GHG-reduction goals and policies, including AB 32.

Downtown Design Guide

The Proposed Project supports the Downtown Design Guide standards and guidelines for creating a sustainable project by redeveloping an underutilized site with an urban infill mixed-use residential development, which maximizes allowable density adjacent to a light rail line, several bus lines, and within a jobs rich area, thus minimizing urban sprawl. Though the Project was approved before the Downtown Design Guidelines were published, the Project's conformity with the Downtown Design Guidelines has been assessed and a consistency table has been submitted to the case file. As noted in the conformity checklist for Project Submittal, the Proposed Project substantially complies with the applicable regulations, findings, standards and provisions of the Downtown Design Guide.

Bicycle Ordinance *(No. 182386 effective March 13,2013)*

In March 2013, the City adopted the citywide Bicycle Ordinance amending Sections 12.03, 12.21, and 12.21.1 of the LAMC to, among other things, extend bicycle parking requirements to some multi-family residential developments; to increase the levels of bicycle parking required under the current code for new developments and additions to commercial, institutional, and industrial uses. Consistent with the provisions of the Bicycle Ordinance, the Proposed Project would include 347 long-term and 40 short bicycle parking spaces in a 3-level subterranean parking garage.

Figueroa and Olympic Sign District *(No. 182200 effective September 12, 20012)*

Subsequent to the 2005 MND being adopted, the Figueroa and Olympic Sign District was adopted setting forth specific signage regulations for the block bounded by Figueroa Street to the west, 9th Street to the north, Flower Street to the east and Olympic Boulevard to the south. The regulations of Ordinance 182200 are in addition to those set forth in the planning and zoning provisions of the Code. The Figueroa and Olympic Sign District contains provisions that establish regulations for sign types, sign height, sign area, number of signs, sign dimensions, sign

content or other time, place or manner regulations that are different from, more restrictive than or more permissive than the Code would allow. Accordingly, the Proposed Project's signage would be regulated by the provisions set forth in the Figueroa and Olympic Sign District.

Entitlements

The MND required necessary land use approvals be obtained through the Department of City Planning, which is updated below. The approval of the current application would bring the project in conformance with the planning and zoning code and no new impacts would result.

X-1 Prior to construction of the Proposed Project, the Project Applicant shall procure all necessary entitlements and land use approvals from the City of Los Angeles Department of City Planning and the Community Redevelopment Agency, including but not limited to the various discretionary actions identified in the request for Vesting Tentative Tract Map 62367, and outlined in Section II. Project Description, of this document.

XI. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

As discussed in the 2005 MND, the Project Site is a designated Commercial zone (C2-4D) and High Density Residential zone ([Q]R5-4D) and is not known to contain any significant mineral resources. The Project Site is not located within an "O" (Oil Drilling) District, nor is it located within a Mineral Resource Zone 2 (MRZ-2) Area, an Oil Drilling/Surface Mining Supplemental Use District, or Oil Field/Drilling Area. Therefore, no impact associated with the loss of availability of a known mineral resource would occur. This conclusion would not be affected by the proposed changes.

Mitigation Measures:

No potentially significant environmental impacts were identified for this issue area. Therefore, no mitigation measures are necessary.

XII. NOISE. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise in level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b. Exposure of people to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	■	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	■	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

The 2005 MND analyzed both construction and operational noise impacts that could be created by the Proposed Project. As stated in the 2005 MND, construction noise levels can be expected to range from 84 dBA to 89 dBA at a distance 50 feet from the construction site, prior to the use of mufflers. Noise levels with the use of mufflers can be expected to range from 82 dBA to 86 dBA at a distance 50 feet from the construction site. Land uses in the vicinity of the Project Site include multiple-family residential buildings; commercial uses, including restaurants, office buildings, and hotels; and surface parking lots. Noise sensitive uses within 500 feet of the Project Site include: The Skyline, a 14-floor multi-family residential building with ground-floor retail located at 600 W. 9th Street, directly across Flower Street east of the Project Site; and The Metropolitan, a 14-floor multi-family residential building located at 930 S. Flower Street, directly across Flower Street southeast of the Project Site. Tenth Street Elementary School, located at 1000 Grattan Street, is approximately 0.6 mile (well over 500 feet) west of the Project Site.

Since 2005, the Phase I portion of the Project Site has been developed which includes the multifamily Tower I and the Lofts Building, which include multi-family residential and retail uses. In addition to changes on the southern potion of the Project Site, several new developments have been constructed in the surrounding area since the 2005 MND was prepared, which include: the 35-story multi-family residential and commercial WaterMarke Tower, located north of the Project Site across 9th Street (constructed in 2009); and the seven-story 9th and Flower residential mixed-use building located on the northeast corner of the intersection of 9th Street and Flower Street (constructed in 2007).

The Proposed Project would result approximately the same general floor area and building massing compared to what was initially approved for the site for Phase II of the Approved Project. As anticipated in the MND, several project sites within the LASED Specific Plan are anticipated to be developed on the east side of Figueroa Street fronting the Project Site. As Phase I of the Proposed Project is complete and occupied, the residents of Apex's Phase 1 Tower and Lofts buildings would be exposed to temporary construction noise during the length of construction. However, as a planned phased development the residents were made aware of the Project's Phase II construction impacts and were presented with disclosure notices prior to taking up residency in Phase I. As such, the exposure of construction noise would be the same and as anticipated and disclosed in the MND for the Approved Project. Pursuant the Noise Ordinance, construction noise levels are exempt from the ambient noise level threshold identified in the Noise Element if all technically feasible noise attenuation measures are implemented. Mitigation measures XII-1 through XII-9 were adopted in conjunction with the MND to mitigate construction noise levels to a less than significant level. These mitigation measures (restated below) would still apply to the Proposed Project and no new impacts would result. Therefore, with implementation of the mitigation measures identified in the 2005 MND (restated below), the Proposed Project would have a less-than-significant impact.

The Proposed Project would result in 60 more residential units and 4,037 less retail square footage than previously approved for the Approved Project. As compared to the 2,624 daily trips that were projected to be generated by the Approved Project, the Proposed Project would result in an approximate 2.8 percent increase in the daily trips. It would take a doubling of the Project's traffic volume (or a 100 percent increase in vehicle trips), to increase the ambient traffic related noise by 3 dBA, which is the increase required to make a noticeable change in the ambient noise conditions. As the proposed project would only result in a 2.8 percent increase in vehicle trips, the increase in noise levels would be indiscernible to the human ear. As such, operational noise impacts would be less than significant.

The Modified Project proposes the addition of an approximately 4,050 square feet of amenity space on a rooftop deck and outdoor recreation spaces. Outdoor deck and amenity areas were proposed as part of the original Project and were adequately analyzed in the 2005 MND. The Tower 1 and the Lofts Building have been constructed with sound insulation sufficient to mitigate interior noise levels below a CNEL of 45 dBA in any habitable room. The added outdoor areas proposed by the Applicant, including the rooftop deck, would not substantially alter or change the operational characteristics of the Original Project. Additionally, all aspects of the Apex Project are required to comply with the City of Los Angeles Noise Ordinance (144,331), which prohibits unnecessary, excessive, and annoying noise. With implementation of Mitigation Measure XII-9 and compliance with the L.A.M.C. operational noise impacts resulting from operation of the Project will remain less than significant as analyzed in the 2005 MND.

Mitigation Measures:

XII-1 The Proposed Project shall comply with the City of Los Angeles Noise Ordinance No. 144,331 and 161,574 and any subsequent ordinances, which prohibit the emission or creation of noise beyond certain levels at adjacent uses unless technically infeasible.

XII-2 Construction and demolition shall be restricted to the hours of 7:00 AM to 6:00 PM Monday through Friday,

and 8:00 PM to 6:00 PM on Saturdays.

XII-3 Construction and demolition activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.

XII-4 Power construction equipment with state-of-the-art noise shielding and muffling devices shall be used.

XII-5 The Proposed Project shall comply with the Noise Insulation Standards of Title 24 of the California Code of Regulations, which insure an acceptable interior noise environment.

XII-6 All construction truck traffic shall be restricted to truck routes approved by the City of Los Angeles Department of Building and Safety, which shall avoid residential areas and other sensitive receptors to the extent feasible.

XII-7 Concrete shall be used in place of metal in the construction of parking ramps.

XII-8 The interior of ramps shall be textured to prevent tire squeal at turning areas.

XII-9 All residential exterior windows shall be constructed with double-pane glass. All exterior wall construction shall provide a Sound Transmission Class of 50 of greater as defined in UBC No. 35-1, 1979 edition or any amendment thereto. Alternately the Project Applicant may submit evidence, along with the application for a building permit, of an alternative means of sound insulation sufficient to mitigate interior noise levels below a CNEL of 45 dBA in any habitable room.

Note: Mitigation Measure XII-3 has been changed to include the language "to the extent feasible" to reflect the practicality of enforcing this measure during construction. A strict interpretation of this measure would prohibit operating more than one piece of equipment at a time, which is not practical or within the intent of this measure.

XIII. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	■	☐
b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

In 2000, the estimated population in the Central City CPA was approximately 25,208 persons. The Community

Plan's expected population growth for the Central City CPA in 2010 was projected to be 27,212 persons. In the past decade there has been substantial redevelopment within the Central City Area with a growing demand for housing in the downtown area. Per the 2010 Census, the population of the Central City CPA was 37,675 persons. The Department of City Planning's current population estimate for the Central City CPA in 2014 is 44,375 persons.[3]

With regard to population and housing impacts, the 2005 MND concluded that the Approved Project would generate 629 dwelling units, approximately 969 residents, and approximately 60 employees within the Central City Planning area of the City of Los Angeles. By comparison the Proposed Project would include the construction of 60 more residential units above the 629 analyzed in the 2005 MND, thereby generating approximately 92 additional residents as compared to the Approved Project. The number of new employees generated by the Proposed Project would be the same as that analyzed in the 2005 MND as no increase in retail square footage is proposed. As the Proposed Project's increase in residents and housing units in the Central City has already been accommodated within regional and local plans (i.e., Central City Community Plan), the Proposed Project's population and housing impacts would be less than significant. Additionally, the Project Site is vacant of any structures and is currently used as surface parking. Therefore, the Proposed Project would not displace existing housing and no significant new population or housing impacts would occur. No mitigation measures are required.

Mitigation Measures:

No potentially significant environmental impacts were identified for this issue area. Therefore, no mitigation measures are necessary.

XIV. PUBLIC SERVICES.

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	■	☐
Police protection?	☐	☐	■	☐
Schools?	☐	■	☐	☐
Parks?	☐	■	☐	☐
Other Public facilities?	☐	☐	■	☐

[3] *Department of City Planning, DRU, Population/Housing Estimate (7/01/2014).*

Fire Protection

The 2005 MND analyzed the Approved Project's potential to increase demands upon LAFD services. Based on the response distance from Fire Station No. 10 to the Project Site, the 2005 MND concluded fire protection would be considered adequate. The adequacy of existing water pressure and availability in the project area with respect to required fire flow is determined by LAFD during the site plan review process prior to construction. As part of the project design, improvements to water infrastructure to increase the capacity of the surrounding area would be made in order to meet the requirements of the LAFD. Potential environmental impacts upon fire services were found to be mitigated to a less than significant impact through the implementation of Mitigation Measure XIV-1 (restated below). The Proposed Project would include an increase of 60 residential units, which would marginally increase the demands upon LAFD for fire protection services. However the Proposed Project would be built to current LAMC and Fire Code standards. Therefore, with implementation of Mitigation Measure XIV-1 (restated below) impacts would be reduced and no new impacts would result. No additional fire-related mitigation measure are required for the Proposed Project.

Mitigation Measures:

XIV-1 The Project Applicant shall submit a plot plan to the Fire Department for approval either prior to the recordation of a final map or prior to the approval of a building permit. The plot plan shall include the following minimum design features: fire lanes, where required, shall be a minimum of 20 feet in width; all structures must be within 300 feet of an approved fire hydrant; and entrances to any dwelling unit or guest room shall not be more than 150 feet in distance in horizontal travel from the edge of the roadway of an improved street or approved fire lane.

Police Protection

The 2005 MND analyzed the Approved Project's potential to increase demands upon LAPD services. The 2005 MND found that environmental impacts may result from project implementation due to the location of the project in an area having marginal police services. However, this potential impact would be mitigated to a level of insignificance by mitigation measure XIV-2 (restated below). As the Proposed Project would include an increase of 60 residential units, impacts upon police protection services would continue to be mitigated to a less than significant impact with mitigation.

Mitigation Measures:

XIV-2 Project design guidelines shall discuss access control to proposed structures, secured parking facilities, walls/fences with key systems, well-illuminated public and semi-public spaces with a minimum of dead space to eliminate areas of concealment, location of toilet facilities or building entrances in high-foot traffic areas, and provision of security guard patrol throughout the Project Site if needed. The Design out Crime Guidelines: Crime Prevention Through Environmental Design, published by LAPD, shall be used for reference. These measures shall be approved by the Police Department prior to the issuance of building

permits.

Schools

As disclosed in the 2005 MND, the Approved Project would generate approximately 131 elementary school students, 59 middle school students and 56 high school students, for a total of approximately 246 students. The Approved Project would develop 60 additional residential units above the 629 residential units allowed under the Approved Project. As such, based on the LAUSD student generation rates used in the 2005 MND, the Proposed Project has the potential to increase the student population by 13 elementary school students, 6 middle school students and 6 high school students. However, current LAUSD student generation rates have actually decreased in recent years for elementary and middle school students. Using current student generation rates provided in the Los Angeles Unified School District School Facilities Needs Analysis, September 2012, the proposed increase of 60 additional residential units has the potential to generate 19 students, including 10 elementary school students, 3 middle school students and 6 high school students. Additionally, under the current LAUSD student generation rates, the 629 units allowed under the Original Project would only generate 193 students. Therefore the proposed 60 additional units combined with the approved 629 residential units would actually result in a net *decrease* of 34 students as compared to the 2005 MND, and therefore no new significant effects or substantially more severe effects would occur with respect to school services by the minor changes proposed by the Applicant.

Furthermore, at the time the 2005 MND was prepared, the Project Site was served by the following schools: 10th Street Elementary School, located at 1000 Grattan Street (K-5th grade); Berendo Middle School, located at 1157 Berendo Street (6th – 8th grade); and Belmont High School, located at 1575 W. 2nd Street (9th – 12th grade). Since the preparation of the 2005 MND several schools have been completed in the vicinity that would also serve the Project Site: Olympic Primary Center, located at 950 S. Albany Street (kindergarten students; completed in 2005); John H. Liechty Middle School, located at 650 S. Union Avenue (6th – 8th grade; completed in 2007); Belmont SH Teacher Preparatory Academy, located 1200 W. Colton Street (9th – 12th grade; completed in 2008); Miguel Contreras Learning Complex, located at 322 S. Lucas Avenue, (9th – 12th grade; completed in 2006); Ramon C. Cortines School of Visual and Performing Arts, located at 450 N. Grand Avenue (9th – 12th grade; completed in 2009); and Edward R. Roybal Learning Center, located at 1200 W. Colton Street (9th – 12th grade; completed in 2008). Olympic Primary Center was built to relieve student volume at 10th Street Elementary. John H. Liechty Middle School was built to relieve student volume at Berendo Middle School. Miguel Contreras Learning Complex, Ramon C. Cortines School of Visual and Performing Arts, Belmont SH Teacher Preparatory Academy, and Edward R. Roybal Learning Center were built to relieve student volume at Belmont High School. Berendo Middle School no longer serves the Project Site. Information provided by LAUSD and contained in the record (Los Angeles Unified School District, Resident School Finder, website: http://rsi.lausd.net/ResidentSchoolIdentifier/, accessed May 2015; Los Angeles Unified School District, Enrollments by Ethnicity, website: http://search.lausd.k12.ca.us/cgi-bin/fccgi.exe?w3exec=enroll0, accessed May 2015; Facilities Services Division, Los Angeles Unified School District, website: http://www.laschools.org/find-schools/all-projects-colin, accessed May 2015) demonstrates that schools serving the Project Site are below capacity and would therefore be able to accommodate the additional students generated by the Project. As discussed in the Addendum, potential school impacts would be mitigated by mitigation measure XIV-3, which

requires payment of applicable school fees in accordance with Government Code Section 65995.

The Proposed Project would not change the conclusions of the 2005 MND with respect to construction impacts on schools because the volume of construction is not increasing. Moreover, the 2005 MND presented a conservative estimate of construction activities as regards Phase II because the volume of construction and soil export required for Phase II is substantially less than for Phase I. Additionally, the nearest school is Olympic Primary Center, which is located at 950 Albany Street, approximately 0.6 mile west of the Project Site.

Nevertheless, potential impacts upon school facilities would be mitigated by mitigation measure XIV-3 (restated below), which would apply to the Proposed Project. Since the payment of school fees is based on the number of dwelling units being developed, the mitigation measure is proportionate to the anticipated level of students to be generated by the Modified Project. Thus, with mitigation, the Proposed Project would not generate any new impacts.

Mitigation Measures:

XIV-3 The Project Applicant shall pay all applicable school fees to the Los Angeles Unified School District to offset the impact of additional student enrollment at schools serving the project area.

Parks

As analyzed in the 2005 MND, the Approved Project includes on-site recreational amenities to serve the recreational needs of the residents and offset additional demands for park facilities that may result from implementation of the Approved Project. ZA-2005-1673-ZV-ZAA-SPR authorized the project to provide 39,208 square feet of common open space in light of the desirability of the project's maximizing ground floor retail space, the cost of property in the South Park Area of Downtown and the project's proximity to such open space and recreational features as Grand Hope Park, L.A. Live, Gilbert Lindsay Plaza, and Pershing Square, as well as the fact that existing buildings located in the same zone and vicinity being converted to residential uses under the Adaptive Reuse Ordinance are not required to comply with open space requirements. As part of the initial phases of the Apex project's development all of the open space required by ZA-2005-1673-ZV-ZAA-SPR for the entirety of the Apex project has been provided through the existing pool deck, mid-block paseo, Urban Park and fitness room. The Apex II project proposes to increase the overall number of units in the Apex project by 9.5%. The Apex II project will also add 13,535 square feet of common open space to the project, thus increasing total common open space by approximately 34% from the amount required by ZA-2005-1673-ZV-ZAA-SPR, for a total requirement of 52,743 square feet of common open space. Such additional open space will be provided by a 4,049 square foot rooftop deck with fire pit, two residential lounges, a 1,959 square foot indoor amenity space, and 5,300 square feet of private open space with residential balconies.

Additionally, pursuant to LAMC Section 21.10.3, the City of Los Angeles imposes a mandatory dwelling unit construction tax to mitigate impacts upon park and recreational facilities. The tax collected pursuant to this ordinance is required to be placed in a "Park and Recreational Sites and Facilities Fund," to be exclusively for the acquisition and development of park and recreational sites and facilities. Any future residential development on

the Project Site would be subject to this tax. Pursuant to LAMC Section 17.12, the Project Applicant would be responsible for the payment of all applicable Quimby fees to the City of Los Angeles. The provision of onsite recreational facilities, along with payment of Quimby fees for the additional dwelling units would serve to mitigate project-related impacts for the Proposed Project. Since the assessment of the City's dwelling unit construction tax and assessment of Quimby fees are based on the number of dwelling units being developed, the mitigation measure is proportionate to the anticipated demands that would be created by the additional dwelling units proposed under the Modified Project. Thus, potential impacts upon neighborhood or regional parks would be reduced to less-than-significant levels upon implementation of mitigation measure XIV-4 (restated below).

Mitigation Measures:

XIV-4 Pursuant to LAMC Section 17.12-A, the Project Applicant shall pay all applicable Quimby fees for the construction of condominium units.

Other Public facilities

With respect to library services, the 2005 MND noted that the Original Project would be served by several Los Angeles Public Library (LAPL) branches, including the Central Library, located at 630 W. 5th Street, approximately 0.6 miles northeast of the Project Site, and the newly built Pico Union Branch Library, located at 1030 Alvarado Street, approximately 1.3 miles west of the Project Site. The 2005 MND also anticipated the construction of the Little Tokyo Branch Library, located 1.4 miles from the Project site. As noted earlier, the student generation potential of the Original Project has decreased from that assumed when the 2005 MND was adopted. The construction of the Little Tokyo Branch Library has now been completed, providing an additional 12,500 square-foot library facility to serve the community. There are no further plans to construct library facilities in the Project area. Accordingly, there is no substantial evidence that the minor changes proposed by the Applicant would result in new or physically altered library facilities, the construction of which could cause significant environmental impacts.

XV. RECREATION.	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	■	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	■	☐

As discussed above, ZA-2005-1673-ZV-ZAA-SPR authorized the project to provide 39,208 square feet of common open space on-site to serve the recreational demands for the Project's residents. Under the Proposed Project, the

amount of square feet of common open space would be increased to 52,743 square feet, with the addition of a 4,049 square foot rooftop deck with fire pit, two residential lounges, a 1,959 square foot indoor amenity space, and 5,300 square feet of private open space with residential balconies to serve the demands of the residents in Tower 2. The provision of the onsite recreational and outdoor facilities, together with the payment of any required Quimby fees, would satisfy the need for any new or physically altered parks or recreational facilities in order to maintain current service ratios. The Proposed Project would generate an increase of approximately 92 additional residents as compared to the Approved Project. As such, Mitigation Measure XIV-4 would still apply to the Proposed Project. Therefore, the Proposed Project's impact upon parks and recreational facilities would be reduced to a less-than-significant level.

Mitigation Measures:

No potentially significant environmental impacts were identified for this issue area. Therefore, no mitigation measures are necessary.

XVI. TRANSPORTATION/CIRCULATION. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	☐	■	☐	☐
b. Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	■	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	■
d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	■
e. Result in inadequate emergency access?	☐	☐	■	☐
f. Result in inadequate parking capacity?	☐	■	☐	☐
g. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	■	☐

The 2005 MND analyzed the potential of the project to impact the surrounding roadways and street system. As concluded in the Traffic Study presented in full in Appendix F to the MND, the Approved Project was expected to generate a total of 2,624 daily trips, including 183 a.m. peak hour trips and 238 p.m. peak hour trips. The 2005 Traffic Study was conducted based on 629 dwelling units and 27,000 square feet of commercial/retail space. The analysis contained in that report showed that the proposed project was not expected to generate any significant traffic impacts after mitigation at two locations. LADOT agreed with the findings of that report and drafted an Approval Letter dated May 27, 2005 (DOT Case No. CEN 04-1591).

The Mobility Group submitted a Traffic Review Memorandum on September 23, 2014 addressing minor modifications to the Proposed Project. The revised Project Description totals include 689 apartment units (a 60 unit increase) and 22,963 sq. ft. of retail space (a 4,037 square-foot decrease). Trip generation estimates were prepared for the Revised 2014 Project Description and were compared to those calculated for the Original 2005 Traffic Study. It was determined that the daily trips were expected to increase from 2,624 trips to 2,696 trips. The AM peak hour trips were expected to increase from 183 trips to 197 trips and PM peak hour trips are expected to increase from 238 trips to 244 trips. Revised level of service analyses were conducted at the study intersections identified in the 2005 Traffic Study using the trip generation estimates calculated for the Revised 2014 Project. The LOS calculations were also updated to account for all existing and planned bike lanes that are to be implemented in the study area. It was calculated that the increase in vehicle trips generated by the Revised 2014 Project would not create any new significant impacts at any of the study locations.

In that memorandum it was concluded that the proposed change in the Project Description is expected to result in a slight increase in the overall number of vehicle trips generated by the Project. However, the increase in vehicle trips as a result of the change from the 2005 Project Description to the 2014 Project Description was not expected to create any new significant impacts. It was therefore concluded that the change in Project Description would not create any new significant impacts and that a new traffic study was not necessary. The Original 2005 Traffic Study identified two mitigation measures at the original two impact locations, and these measures would continue to be applicable. That memorandum, dated September 23, 2015 was approved by LADOT on October 3, 2014 (See Attachment B, 2014 Approval Letter).

A supplemental evaluation of the 2014 Project was conducted with a completely updated traffic analysis, including updated 2015 traffic counts, an updated related project list and updated intersection configurations to reflect recently installed and planned bike lanes. The Project description has not changed from the 2014 configuration. This revised analysis (dated November 24, 2015) was conducted in accordance with LADOT's current Traffic Impact Analysis Guidelines and was approved by LADOT staff in a written correspondence dated December 12, 2015 (See Attachment B, 2015 Approval Letter).

The traffic analysis included 2015 traffic counts (conducted in March and May of 2015) at all study intersections. This analysis took into account updated intersection lane configurations to account for existing and planned bike lanes and roadway improvements in the study area, including the MyFigueroa Project, and included a revised related project list with 69 current projects that are approved but not yet constructed, or proposed within the study

area. Trips for the completed Phase 1 portion of the project were included in the new 2015 traffic counts. The analysis of potential new impacts was therefore conducted on the incremental addition of trips from the yet to be completed Phase 2 portion of the project. These trip generation estimates, which are based on ITE Trip Generation 9th Edition, are shown in Table 2 in Attachment B. The intersection analysis was then updated for the existing traffic counts, the 2015 intersection lane configurations and the 2015 related project list. The updated intersection Level of Service analysis and Level of Service calculations are shown in Attachment B to this Addendum. The updated Traffic Study demonstrates that there would be no new significant traffic impacts from the 2005 Original Project and the 2014 Revised Project (Phase 2), as evaluated with updated 2015 conditions. However, the original two mitigation measures would continue to apply for the overall buildout of the project.

It should be noted that the 2005 MND stated that: "[c]onstruction of the Proposed Project could result in temporary closure of sidewalks on the streets surrounding the Project Site, however, lane closures are not anticipated." It is now anticipated that construction of Phase II will require the temporary closure of the southernmost lane on 9th Street between Figueroa Street and Flower Street and the 9th Street sidewalk adjacent to the Project Site for the duration of the construction period. As noted in Mitigation Measure XVI-3, Construction Plan, below, a construction work site traffic control plan will be required to be submitted for DOT's approval prior to the start of any construction work. The plan will show the location of the proposed roadway and sidewalk closures. During the construction period, through traffic on 9th Street will be changed from four eastbound lanes with a shared right-turn lane to three through lanes with a shared right-turn lane. Pedestrian access on the south sidewalk along 9th Street between Figueroa Street and Flower Street immediately fronting the Project Site would also be temporarily closed, and pedestrians would be directed to cross to the north side of 9th Street for east-west access between Figueroa Street and Flower Street. The pedestrian sidewalk on the west side of Flower Street fronting the Project Site would be closed only for a 3-month period during the grading and excavation activities, after which a protected and covered pedestrian walkway will be provided to facilitate north-south access on the west side of Flower Street during the remainder of the construction period. As the temporary lane and sidewalk closures would be temporary in nature and would not extend beyond the length of the construction period, this impact would be considered less than significant.

Mitigation Measures:

XVI-1 9th Street and Flower Street. Restripe the eastbound approach from four through lanes, and one exclusive right-turn lane to three through lanes, one shared through/right-turn lane, and one exclusive right-turn lane. This can be accomplished without any additional right-of-way and within the existing curb-to-curb width of 9th Street.

XVI-2 Figueroa Street and Olympic Boulevard: Restripe the westbound approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to one left-turn lane, three through lanes, and one exclusive right-turn lane. This improvement would require street widening and obtaining additional right of way. [Note: This measure has already been complied with and is reflected in the existing conditions.]

XVI-3 Construction Plan: A construction work site traffic control plan shall be submitted to DOT for review and

approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that all construction related traffic be restricted to off-peak hours.

XVI-4 The Project Applicant shall request and obtain approval for a variance seeking relief from the City Planning Department Deputy Advisory Agency's parking standards. [Note: This measure has already been complied with as reflected in the approved entitlements under Recorded Tract Map No 62367 and Case No. ZA-2005-1673-ZV-ZAA-SPR.]

XVII. UTILITIES. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	■
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	■	☐
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
d. Have sufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed?	☐	☐	■	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	■	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	■	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	■

Wastewater

The Project Site is served by existing sewer lines in the streets surrounding the Project Site, including an existing eight-inch, 10-inch and 42-inch sewer lines in Figueroa Street and a 10-inch sewer line in Hope Street, which feed into an existing 24-inch sewer line in Hope Street. At the time the 2005 MND was prepared, current capacities of these sewer lines were unavailable; however, based on design capacities the sewer lines were expected to be able to accommodate the wastewater generated by the Approved Project. Final determination of local sewer line capacity

would be determined as part of the permitting process for the Approved Project. As shown in the 2005 MND, the Approved Project's 629 dwelling units and 27,000 square feet of commercial uses were estimated to generate approximately 88,320 gallons per day of sewage. While the Proposed Project would result in 60 additional dwelling units, the L.A. Green Building Ordinance mandates a 20% reduction in water use for all residential projects. Thus, the 360 dwelling units to be constructed under Phase II would be subject to the new energy and water efficiency standards and would generate less water and wastewater as compared to the Approved Project. As shown in Table 8, below, the wastewater generation for Phase II under the Proposed Project would be reduced by approximately 6,953 gpd as compared to what was estimated in the MND for the Approved Project. As such, the Proposed Project is expected to have a less-than-significant impact with respect to wastewater treatment and infrastructure. No new impacts would be created and no mitigation measures are required.

Table 8
Proposed Project Expected Sewage Generation

Type of Use	Size	Sewage Generation Rate (gpd/unit)	Total Sewage Generated (gpd)
Approved Project [a]			
Multi-Family Residential Units –Studios/1 Bdrm. Condos	386	120/du	46,320
Multi-Family Residential Units - 2 Bdrm. Condos	219	160/du	35,040
Multi-Family Residential Units - 3 Bdrm. Condos	24	200/du	4,800
Commercial Uses	27,000	80/1,000 sf	2,160
Total Sewage Generation of Approved Project			**88,320**
Phase I of the Approved Project (Completed)			
Multi-Family Residential Units –Studios	41	80/du	3,280
Multi-Family Residential Units –1 Bdrm. Condos	179	120/du	21,480
Multi-Family Residential Units - 2 Bdrm. Condos	123	160/du	19,680
Multi-Family Residential Units - 3 Bdrm. Condos	5	200/du	1,000
Commercial Uses	13,004	80/1,000 sf	1,040
Total Sewage Generation of Completed Phase I			**46,480**
Proposed Project			
Multi-Family Residential Units –Studios	96 du	64/du [b]	6,144
Multi-Family Residential Units –1 Bdrm. Condos	111 du	96/du [b]	10,656
Multi-Family Residential Units - 2 Bdrm. Condos	134 du	128/du [b]	17,152
Commercial Uses	11,687	80/1,000 sf	935
Total Sewage Generation of Proposed Project (Phase II)			**34,887**
Total Sewage Generation of Phase I and Phase II Combined			**81,367**
Net Change in Sewage Generation from Approved Project			**-6,953**

Notes: du = dwelling unit, gpd = gallons per day, sf = square feet

[a] *ENV-2005-1674-MND.*

[b] *The standard sewerage generation rate was decreased by 20 percent to reflect a 20 percent mandatory water reduction pursuant to Ordinance 181480.*

Stormwater

The Project Site is currently served by existing storm drains in surrounding streets curbs. As discussed in the 2005 MND, the Project Site is entirely paved with surface parking and no permeable surface area remains. The Proposed Project would therefore neither increase nor decrease the amount of permeable surface area. As such, the Proposed Project would not increase the amount of surface runoff from the Project Site and runoff from the Project Site would not exceed the capacity of existing or planned stormwater drainage systems. Therefore, no impact would occur. The Proposed Project would not alter or change this conclusion. All surface water runoff from the site will continue to be conveyed to the public storm drain. The Proposed Project will however, include storm water BMPs (See Section IX. Hydrology And Water Quality), which will serve to retain and treat stormwater prior to discharging surface water runoff into the storm drains. Because no retention basins are provided by the surface parking operations, the Proposed Project will have a net benefit to stormwater flows after development. Impacts would be less than significant.

Water Supplies

Pursuant to Resolution No. 005-185 (See Attachment C), the LADWP Board of Commissioners approved the Water Supply Assessment prepared for the Approved Project and concluded that the water demand generated by the Proposed Project falls within the available and projected water supplies for normal, single-dry, and multiple-dry years through 2020, and within the 20-year water demand growth projected in LADWP's Year 2000 Urban Water Management Plan. As a result, the LADWP found that it would be able to meet the water demand of the Approved Project, in addition to existing and planned future uses of LADWP's system. As such, no new or expanded water entitlements or resources would be necessary for the operation of the Approved Project. With implementation of XVII-1 and XVII-2, impacts upon water availability were found to be less than significant in the prior MND.

L.A. Green Code: In 2010, the City adopted the 2010 California Green Building Standards Code, also known as CALGreen, with amendments, as Ordinance No. 181,480, thereby codifying provisions of CALGreen as the new Los Angeles Green Building Code ("*L.A. Green Building Code*"). As of January 2011, the *L.A. Green Building Code* is applicable to the construction of new buildings (residential and nonresidential), building alterations with a permit valuation of over $200,000, and residential and nonresidential building additions. The *L.A. Green Building Code* contains both mandatory and voluntary green building measures for the reduction of GHG emissions through energy conservation. The *L.A. Green Building Code* requires projects to achieve a 20 percent reduction in potable water use and wastewater generation, meet and exceed Title 24 Standards adopted by the California Energy Commission on December 17, 2008, and meet 50 percent construction waste recycling levels. In addition, the Proposed Project is required to implement applicable energy conservation measures to reduce GHG emissions such as those described in AB 32, as described above.

The total water demands for the Proposed Project were recalculated to account for a 20 percent mandatory water conservation requirements imposed by the *L.A. Green Building Code*. As shown in Table 9, below, the revised water demand for the entire Project (Phase I and Phase II combined) would be approximately 3,976 gallons per day

(or 4 acre feet per year) below the water demand estimated by the DWP in the 2005 Water Supply Assessment (WSA) that was adopted for the Approved Project. Therefore, because the water demands for the Project would not exceed the estimated demands as identified in the WSA or MND, the Proposed Project would not result in any new significant water supply impacts. Mitigation measures XVII-3 and XVII-4 (restated below), which call for specific water conservation strategies have been superseded with the more restrictive energy conservation mandates imposed by the L.A. Green Building Code.

Table 9
Proposed Project Expected Water Demand

Land Use	Unit	Water Demand (gpd/unit)	Water Demand (gpd)	Water Demand (AF/Yr)
Loft	75	80	6,000	7
1 BR	304	120	36,480	41
2 BR	252	160	40,320	45
Commercial	39,414	0.08	3,153	4
Auto	363,157	0.02	7,263	8
Outdoor Water Use			17,821	20
Total Projected Water Demand (Per WSA)			**111,037**	**124**
Phase 1 Development As Built (Tower 1 and Lofts)				
Loft	41	80	3,280	4
1 BR	179	120	21,480	24
2 BR	123	160	19,680	22
3 BR	5	200	1,000	1
Commercial	13,004	0.08	1,040	1
Auto	197,405	0.02	3,948	4
Outdoor water use			17,821	20
Total Phase 1			**68,249**	**76**
Phase 2 (Proposed Project)				
Loft	96	80	7,680	9
1 BR	111	120	13,320	15
2 BR	134	160	21,440	24
Commercial	11,687	0.08	935	1
Auto	196,254	0.02	3925	4
Subtotal Water Demand Phase 2			*47,300*	*53*
Less 20% Mandatory Water Conservation for Residential Plumbing Fixtures			-8,488	-10
Total Water Demand Phase 2			***38,812***	***43***
TOTAL WATER DEMAND (Phase 1 + Phase 2)			**107,061**	**120**
Net Change (Total Existing + Proposed – WSA Projection)			-3,976	**-4**

Notes: du = dwelling unit, gpd = gallons per day, sf = square feet

[a] *Los Angeles Department of Water and Power Water Supply Assessment for the 9th & Figueroa Project, February 23, 2005 (See Appendix C to this Addendum).*

[b] *Per the City of Los Angeles Green Building Code (Ordinance 181480) a schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by at least 20 percent shall be provided.*

[c] *Preston Architect, PC, November 5, 2014.*

Source: Parker Environmental Consultants, 2014.

Mitigation Measures:

XVII-1: The Proposed Project shall comply with City Ordinance No. 170,978 (Water Management Ordinance), which imposes numerous water conservation measures in landscape, installation, and maintenance (e.g., use drip irrigation and soak hoses in lieu of sprinklers to lower the amount of water lost to evaporation and overspray, set automatic sprinkler systems to irrigate during the early morning or evening hours to minimize water loss due to evaporation, and water less in the cooler months and during the rainy season).

XVII-2 If conditions require, LADWP may postpone new water connections for the Proposed Project until water supply capacity is adequate.

Solid Waste

Based on the analysis contained in the 2005 MND, the Approved Project would generate a maximum of 2,746 tons of construction waste during construction. Changes to the Proposed Project would not increase the floor area of the development and as such construction waste would not increase as compared to what was previously analyzed in the 2005 MND. During Operation the 2005 MND concluded that the Approved Project would generate approximately 2,651 pounds (1.32 tons) of solid waste per day during operation. The increase of 60 residential units as proposed by the Proposed Project would generate approximately 240 additional pounds (0.12 tons) of solid waste per day during operation. Although the Proposed Project would increase the Project's generation of solid waste as compared to the Approved Project, the amount of solid waste generated by the Proposed Project is within the available capacities at the area landfills. As such, no new significant solid waste impacts would occur. Additionally, implementation of mitigation measure XVII-3 through XVII-5 (restated below) would remain applicable to the Proposed Project and would further ensure that operational impacts related to solid waste are less than significant.

Mitigation Measures:

XVII-5 All waste shall be disposed of properly. Use appropriately labeled recycling binds to recycle construction materials including: solvents, water-based paints, vehicle fluids, broken asphalt and concrete; wood and vegetation. Non recyclable materials/wastes must be taken to an appropriate landfill. Toxic wastes must be discarded at a licensed regulated disposal facility.

XVII-6 The Project Applicant shall institute a recycling program to the satisfaction of the Zoning Administrator to reduce the volume of solid waste going to landfills in compliance with the City's goal of a 50 % reduction in the amount of waste going to landfills by the year 2000.

XVII-7 Recycling bins shall be provided at appropriate locations to promote recycling of paper, metal, glass, and other recyclable materials

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	❑	❑	❑	■
b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	❑	❑	■	❑
c. Does the project have environmental effects, which cause substantial adverse effects on human beings, either directly or indirectly?	❑	❑	■	❑

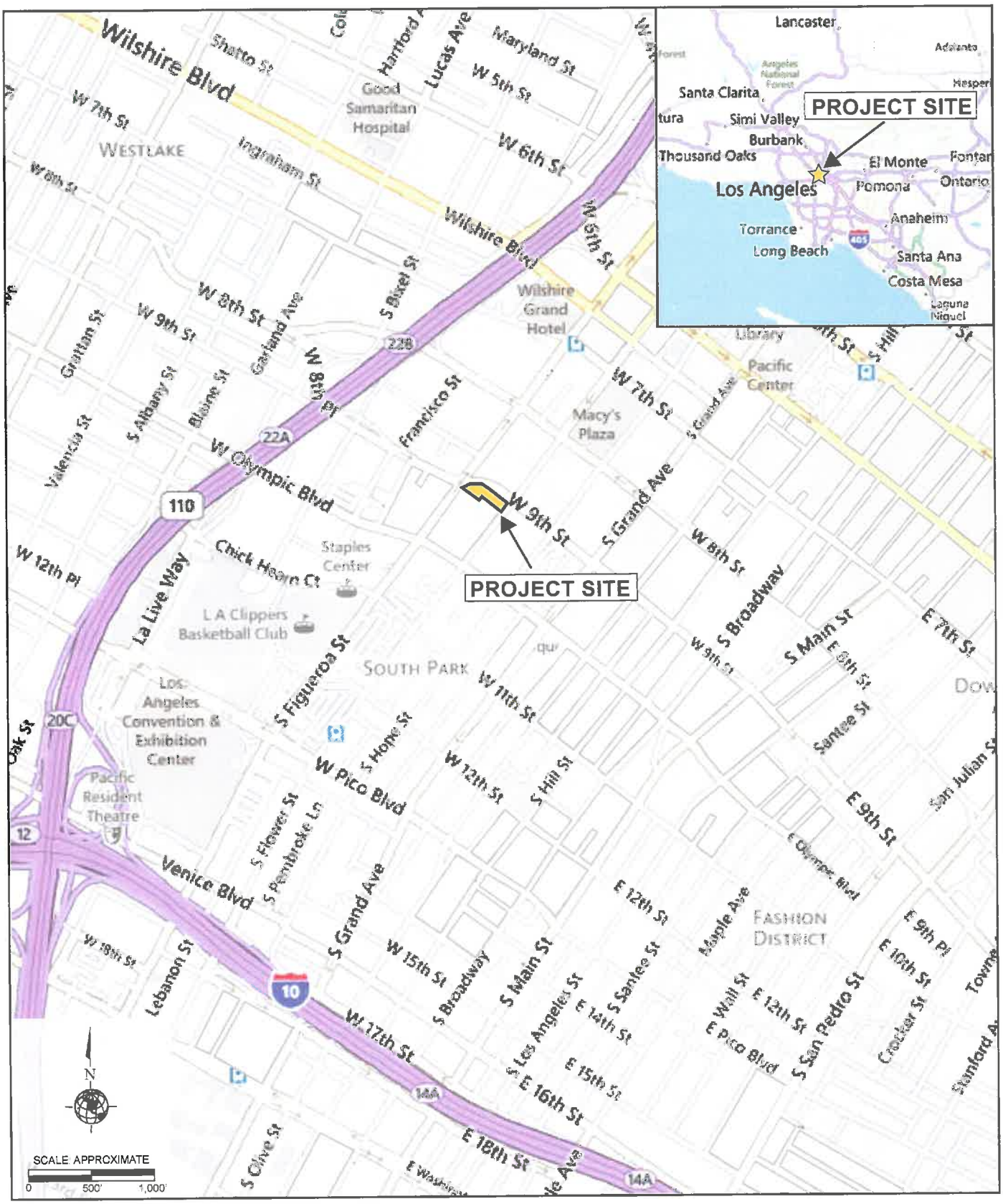
As discussed in Section IV. Biological Resources and Section V. Cultural Resources, the Proposed Project would not create or contribute to any significant impacts to biological or cultural resources. As such, the Project does not have the potential to degrade the environment or habitat, reduce or threaten fish or wildlife populations or animal communities, or eliminate important examples of the major period of California history or prehistory and no impact would occur. In addition, the changes proposed for the Approved Project do not create or contribute to any significant impacts. As such, the Project does not contribute to any cumulatively considerable impacts. As identified in this Addendum, the Proposed Project does not create any significant impacts that may cause substantial adverse effects on human beings, either directly or indirectly. As such, impacts would be less than significant.

☞ **DISCUSSION OF THE ENVIRONMENTAL EVALUATION (Attach additional sheets if necessary)**

As noted above, the lead agency has determined that the proposed project may result a significant effect on the environment, and an environmental impact report is required.

PREPARED BY	TITLE	TELEPHONE #	DATE
Oliver Netburn	City Planning Associate	(213) 978-1382	January 7, 2016

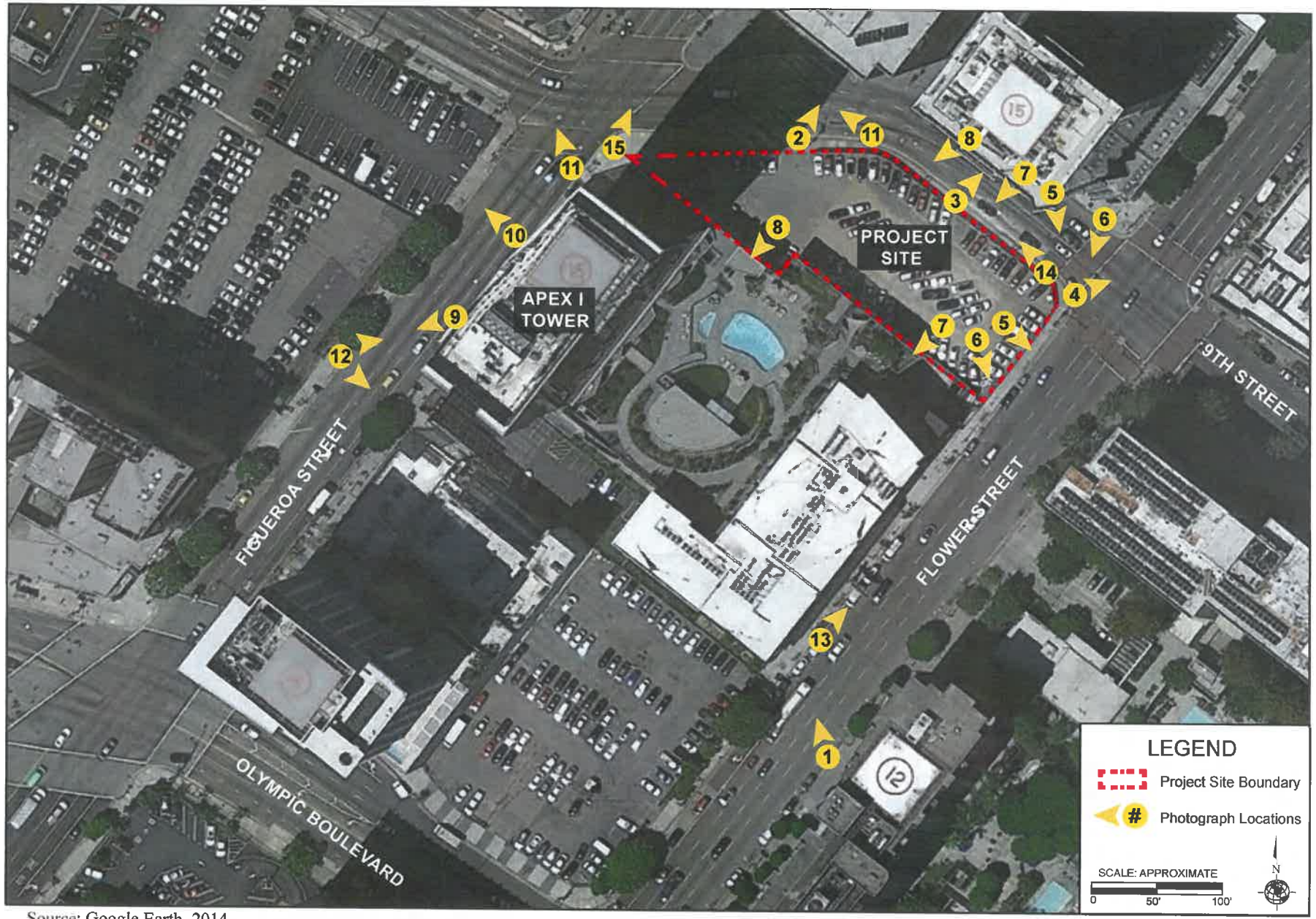
Exhibits



Source: Bing Maps, 2013

PARKER ENVIRONMENTAL CONSULTANTS

Figure 1
Project Location Map

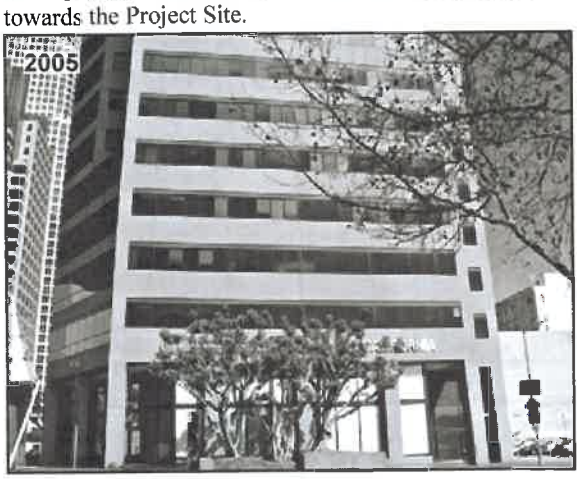


Source: Google Earth, 2014

PARKER ENVIRONMENTAL CONSULTANTS

Figure 2
Aerial Photograph of the Project Site

View 1: View from the 14-story residential building, The Metropolitan, looking northwest across Flower Street towards the Project Site.



View 2: View from the Project Site looking north across 9th Street towards the 35-story International Bank of California tower.

View 3: View from the Project Site looking north across 9th Street towards a surface parking lot.

View 1: View from the west side of Flower Street looking northwest at Tower I and the Lofts Building (Phase I of the Approved Project, constructed in 2009).

View 2: View from the Project Site looking north across 9th Street towards the 35-story International Bank of California tower.

View 3: View from the south side of 9th Street looking northeast at the 35-story WaterMarke Tower, formerly surface parking, constructed in 2009.

Source: Parker Environmental Consultants, 2014

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Figure 3
Views of the Project Site and Surrounding Land Uses
Views 1, 2 and 3

View 4: View from the Project Site looking northeast across the intersection of 9th Street and Flower Street towards a vacant lot under construction.

View 4: View from the intersection of the 9th Street and Flower Street looking northeast at the seven-story mixed-use development, 9th and Flower, constructed in 2007.

View 5: View from the Project Site looking east across Flower Street towards the 14-story multiple-family residential building, The Skyline.

View 5: View from the north side of 9th Street looking south at the Project Site.

View 6: View from the Project Site looking southeast across Flower Street towards the 14-story multiple-family residential building, The Metropolitan.

View 6: View from the intersection of 9th Street and Flower Street looking south towards the 14-story multiple-family residential building, The Metropolitan.

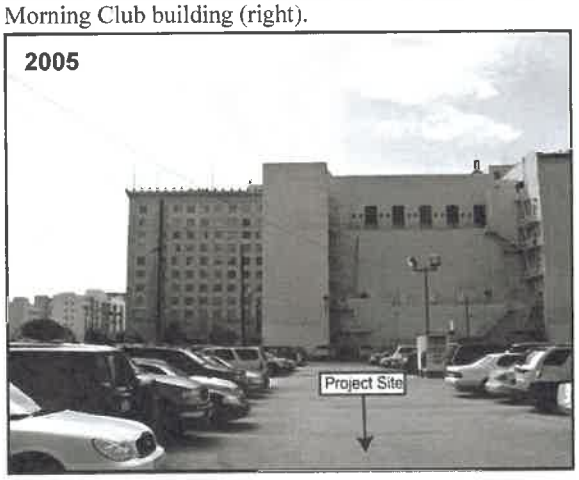
Source: Parker Environmental Consultants, 2014

PARKER ENVIRONMENTAL CONSULTANTS

Figure 4
Views of the Project Site and Surrounding Land Uses
Views 4, 5 and 6

View 7: View from the Project Site looking southeast towards a surface parking lot and the five-story Friday Morning Club building (right).

View 7: View from the north side of 9th Street looking southeast at the Project Site and the seven-story Lofts Building, constructed under Phase I of the Approved Project.



View 8: View from the Project Site looking south at the north face of the Friday Morning Club building located adjacent to the Project Site.

View 8: View from the intersection of 9th Street and Flower Street looking east towards the Project Site and Tower I of the Approved Project.

View 9: View from the Project Site looking southwest across Figueroa Street towards the three-story Inn Towne Motel, and the 11-story Hotel Figueroa.

View 9: View from the Project Site looking southwest across Figueroa Street towards the three-story Inn Towne Motel, and the 11-story Hotel Figueroa.

Source: ENV-2005-1674-MND, 2005; Parker Environmental Consultants, 2014

PARKER ENVIRONMENTAL CONSULTANTS

Figure 5
Views of the Project Site and Surrounding Land Uses
Views 7, 8 and 9

View 10: View from the Project Site looking west across Figueroa Street towards a surface parking lot.

View 10: View from the Project Site looking west across Figueroa Street towards a surface parking lot.

View 11: View from the intersection of 9th Street and Figueroa Street cooking northwest towards the low-rise Pantry cafe and the 35-story commercial TCW tower.

View 11: View from the intersection of 9th Street and Figueroa Street looking northwest towards the low-rise Pantry cafe and the 35-story commercial TCW tower.

View 12: View from the west side of Figueroa Street looking east towards the front facade of the Friday Morning Club building.

View 12: View from the west side of Figueroa Street looking northeast towards Tower I of the Approved Project and the front facade of the Friday Morning Club building.

Source: ENV-2005-1674-MND, 2005; Parker Environmental Consultants, 2014

PARKER ENVIRONMENTAL CONSULTANTS

Figure 6
Views of the Project Site and Surrounding Land Uses
Views 10, 11 and 12

View 13: View from the west side of Flower Street looking north towards downtown Los Angeles.

View 13: View from the west side of Flower Street looking north towards downtown Los Angeles.

View 14: View from the south side of 9th Street looking west. The 35-story TCW tower and the 20-story International Bank of California tower.

View 14: View from the south side of 9th Street looking west. The 35-story TCW tower and the 20-story International Bank of California tower.

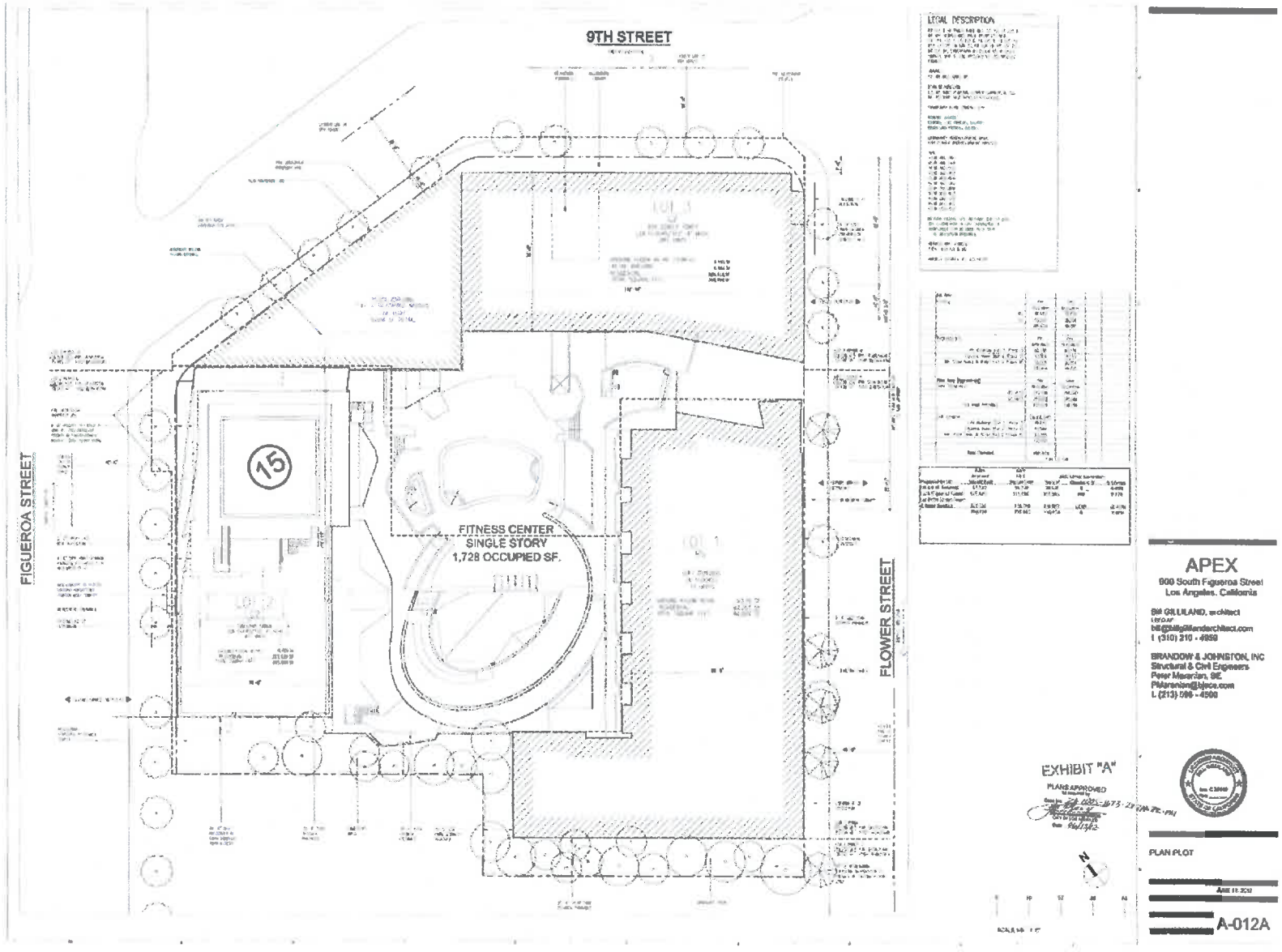
View 15: View from the intersection of 9th Street and Figueroa Street looking north towards downtown Los Angeles.

View 15: View from the intersection of 9th Street and Figueroa Street looking north towards downtown Los Angeles.

Source: ENV-2005-1674-MND, 2005; Parker Environmental Consultants, 2014

PARKER ENVIRONMENTAL CONSULTANTS

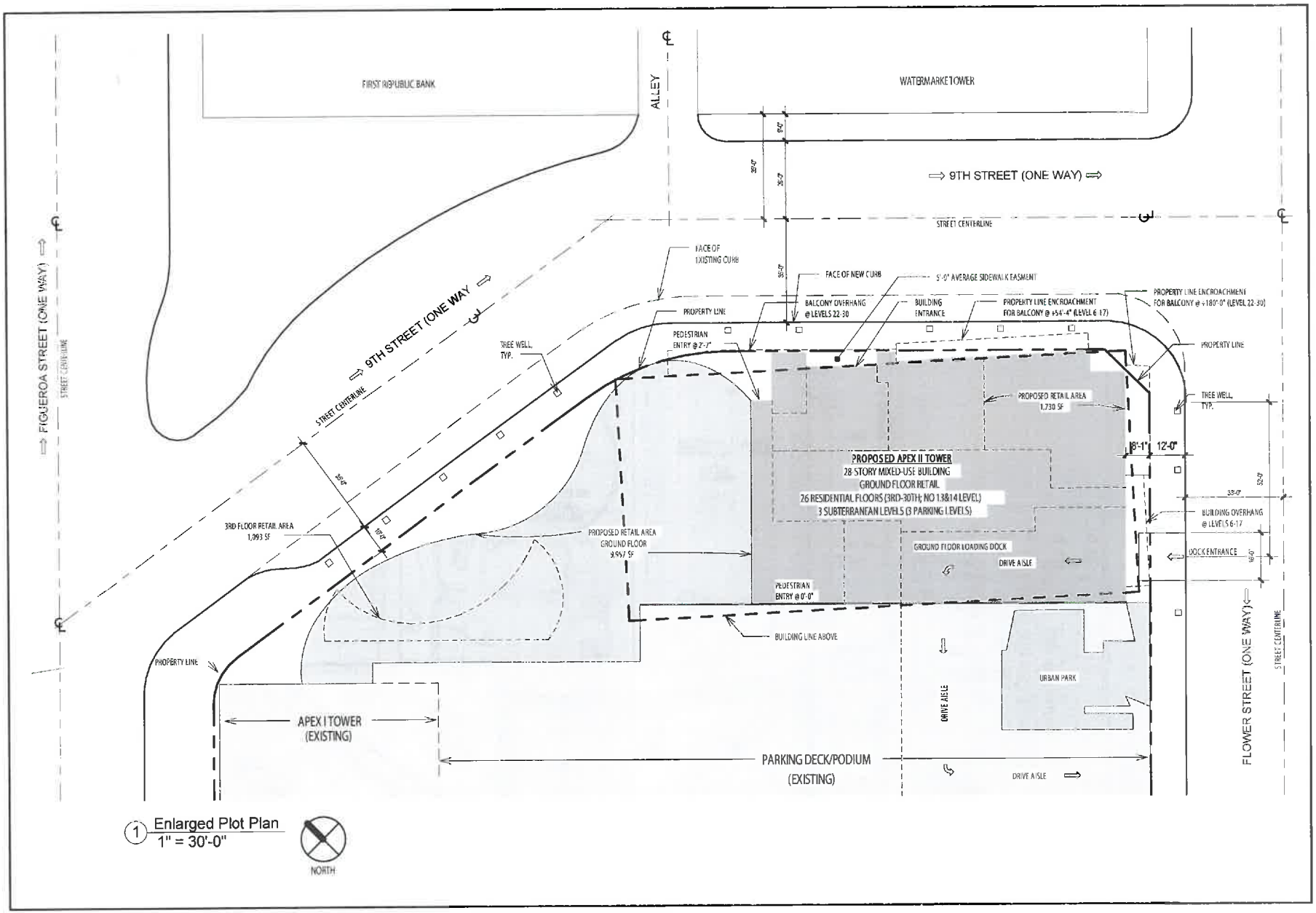
Figure 7
Views of the Project Site and Surrounding Land Uses
Views 13, 14 and 15



Source: City of Los Angeles, Department of City Planning, ZIMAS, Case No. ZA-2005-1673-ZV-ZAA-SPR., Plot Plan dated August 22, 2012

PARKER ENVIRONMENTAL CONSULTANTS

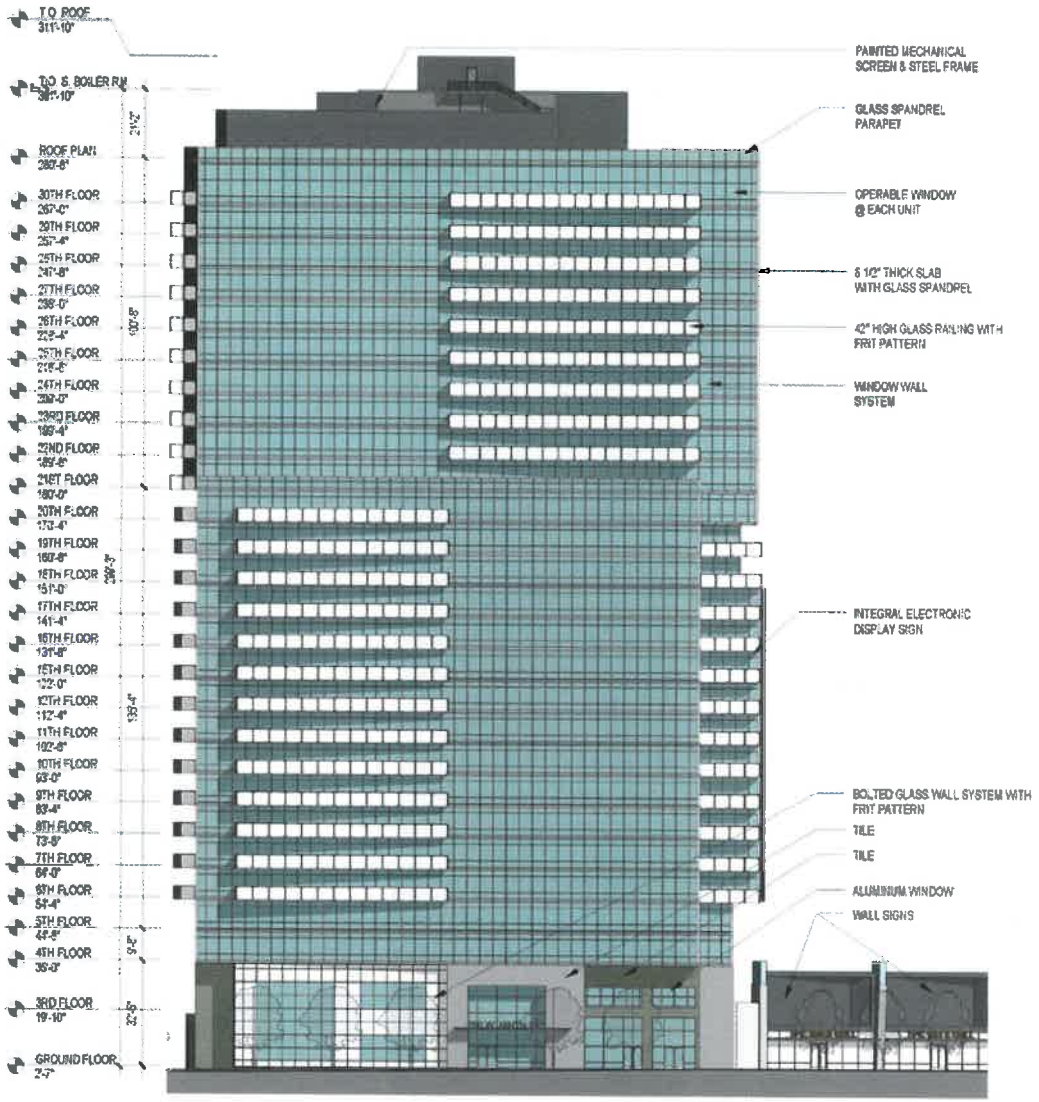
Figure 8
Exhibit "A" – 2012 Approved Plot Plan



Source: Preston Architects, PC, December 17, 2014

PARKER ENVIRONMENTAL CONSULTANTS

Figure 9
Plot Plan

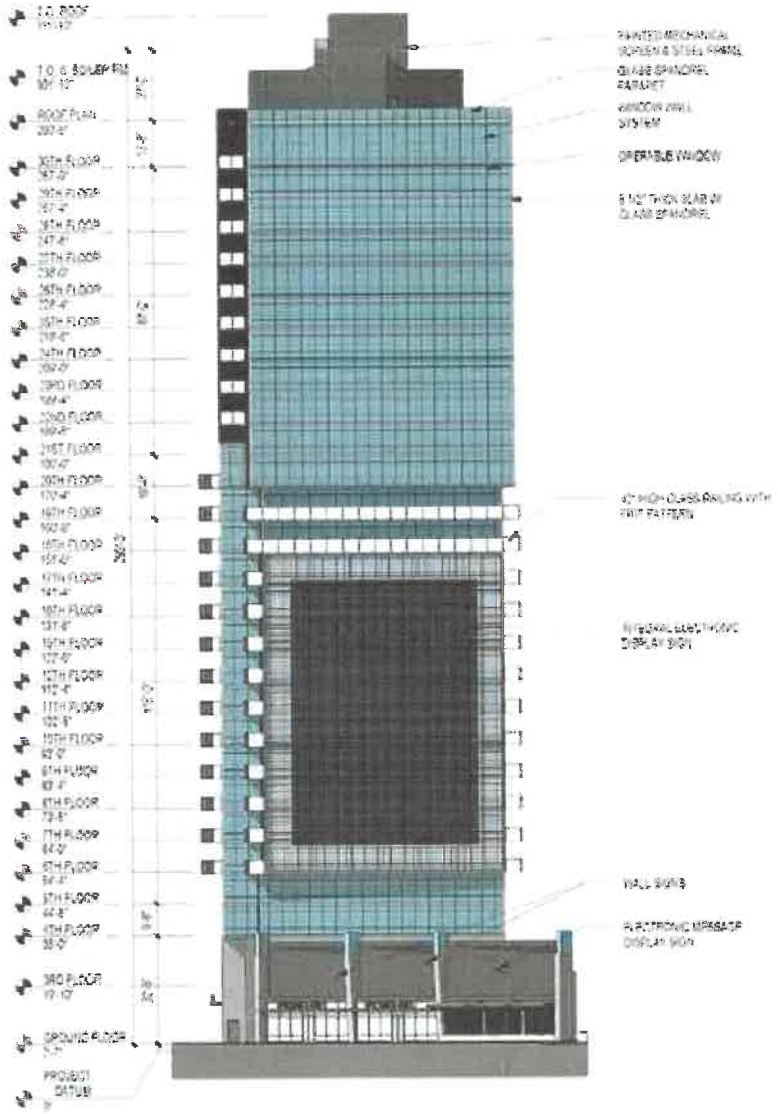


1 NORTH ELEVATION
1/32" = 1'-0"

Source: Preston Architects, PC, November 17, 2014

PARKER
ENVIRONMENTAL CONSULTANTS

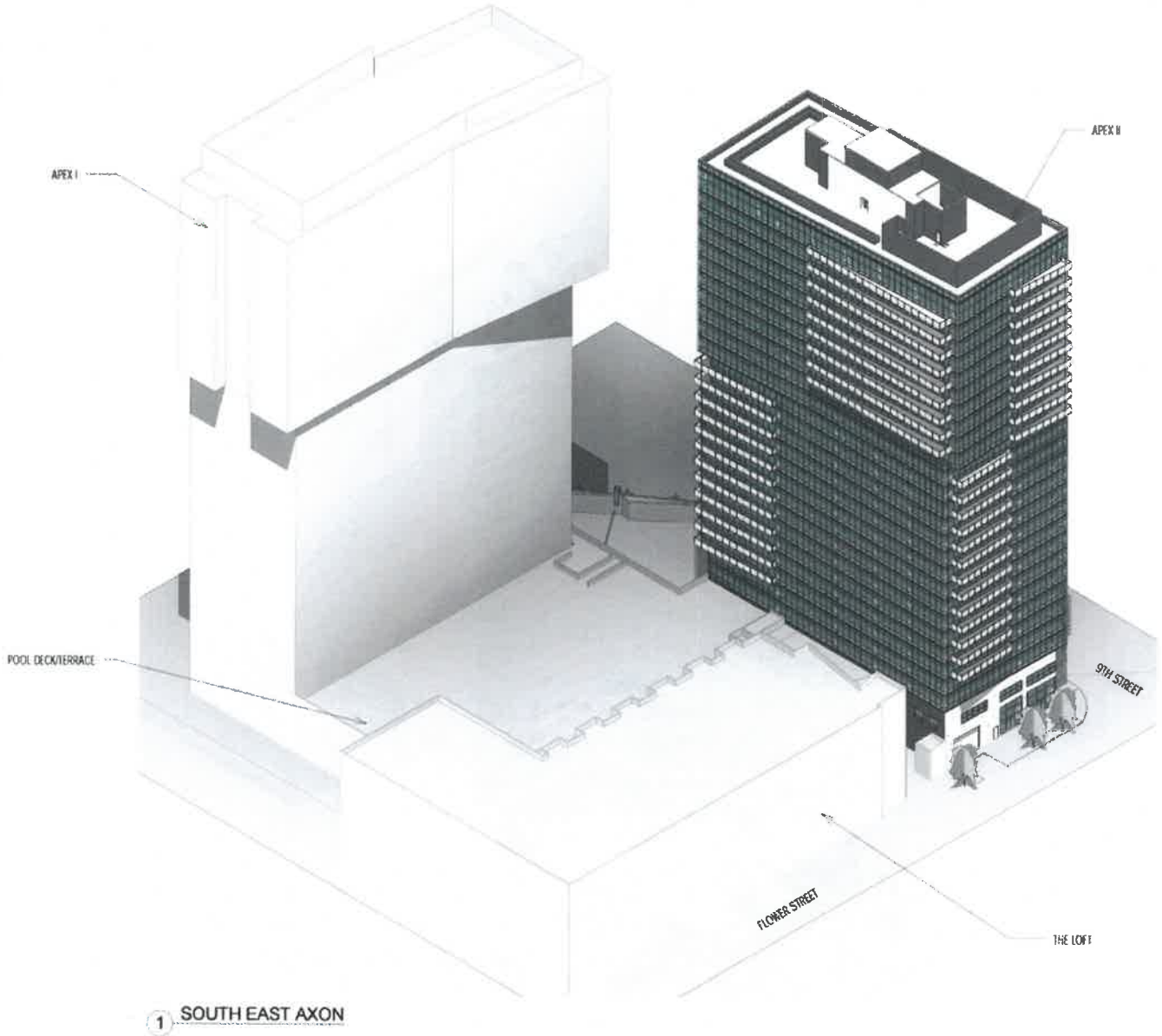
Figure 10
North Elevation



Source: Preston Architects, PC, November 17, 2014

PARKER ENVIRONMENTAL CONSULTANTS

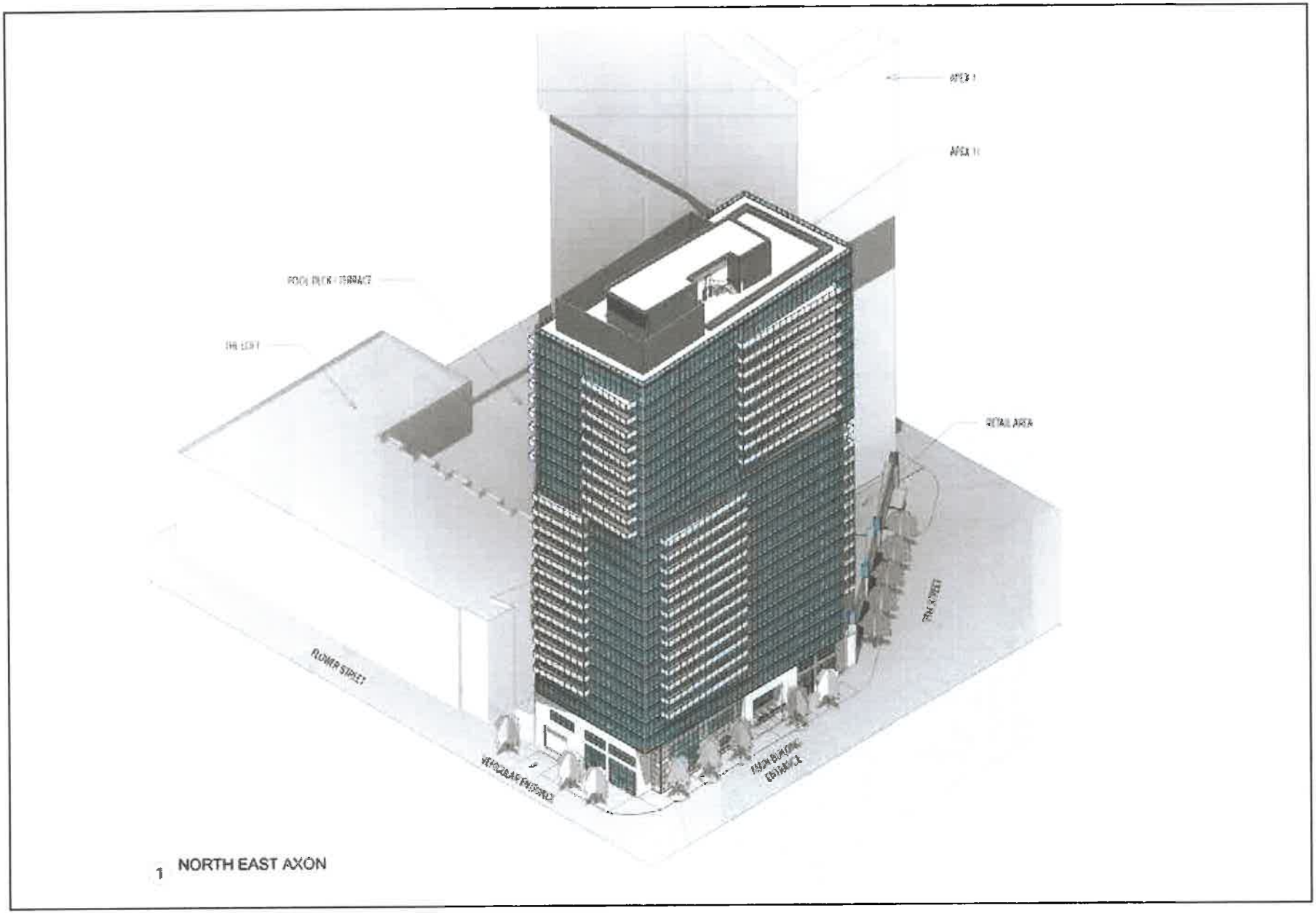
Figure 11
West Elevation



Source: Preston Architects, PC, November 17, 2014

PARKER ENVIRONMENTAL CONSULTANTS

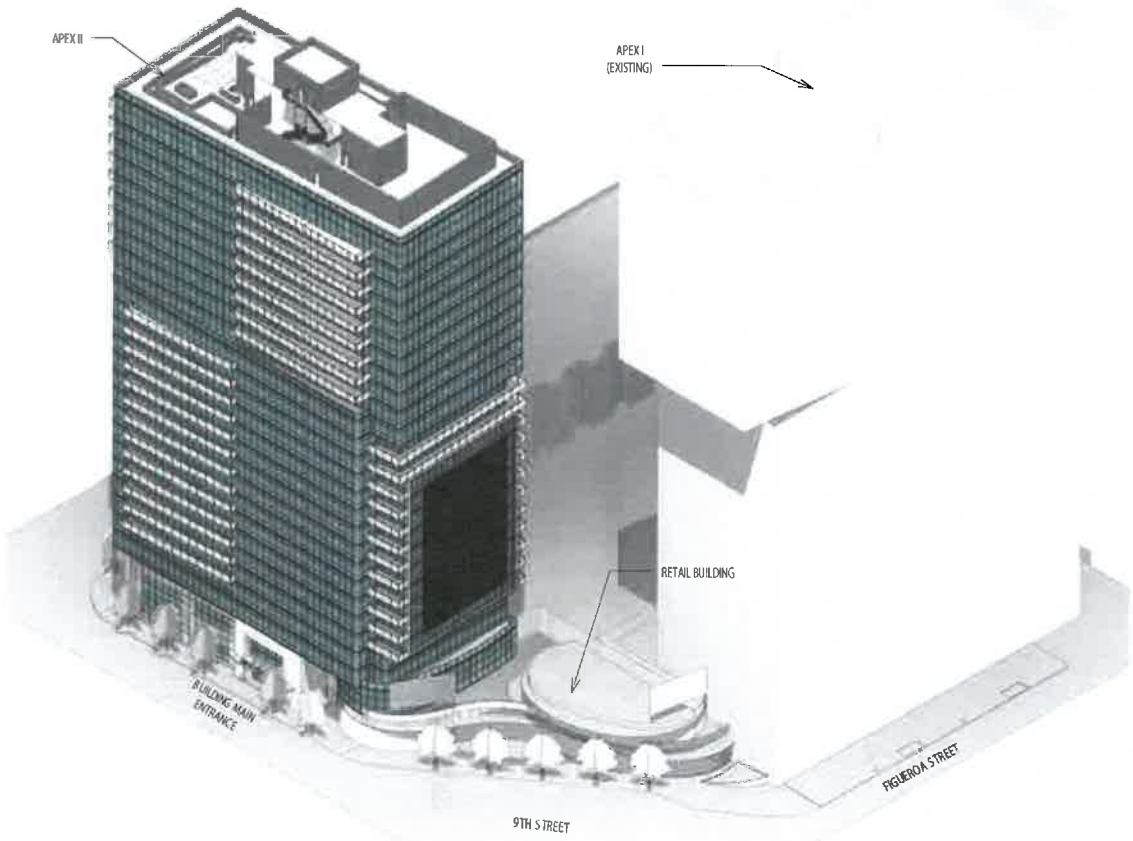
Figure 12
South East Axon



Source: Preston Architects, PC, November 17, 2014

PARKER ENVIRONMENTAL CONSULTANTS

Figure 13
North East Axon



1 NORTH WEST AXON

Source: Preston Architects, PC,

PARKER
ENVIRONMENTAL CONSULTANTS

Figure 14
North West Axon

Attachment A

CalEEMod Worksheets for the APEX II Project

December 23, 2015

Apex II Revised 12 23 2015

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse High Rise	689.00	Dwelling Unit	0.81	727,947.00	1062
Strip Mall	22.96	1000sqft	0.00	22,963.00	0
Enclosed Parking with Elevator	998.00	Space	0.00	399,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Operational Project includes Phase I (Tower I and Loft Bldg) and Phase II (Tower2).

Construction Phase - Construction schedule assumes approx. 30 months.

Off-road Equipment - Grading phase equipment to add 1 excavator and 2 loaders/tractors/backhoes (Grading footprint is 14,700sf).

Grading - Site Prep includes entire lot area of 35,594 sf; Grading area is limited to parking garage footprint of 14,700 sf.

Woodstoves - No woodstoves or fireplaces are proposed.

Sequestration - 15 Trees per Site Plan.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Energy mitigation measures reflect City of LA Green Building mandates for high rise residential.

Water Mitigation -

Waste Mitigation -

Off-road Equipment - Site Prep assumes 1 tractor/backhoe. (deleted 1 grader)

Off-road Equipment - Added cement mortar mixer for bldg. construction phase

Off-road Equipment -

Off-road Equipment - Changed cement mortar mixer to 1 for paving.

Architectural Coating - Architectural coating surface area was modified to reflect only Phase II construction as Phase I is completed.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	211,082.00	13,844.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	633,245.00	41,543.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	491,364.00	230,175.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,474,093.00	690,525.00
tblConstructionPhase	NumDays	5.00	160.00
tblConstructionPhase	NumDays	100.00	420.00
tblConstructionPhase	NumDays	2.00	80.00
tblConstructionPhase	NumDays	5.00	10.00

tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/1/2018	9/28/2018
tblConstructionPhase	PhaseStartDate	9/18/2018	9/17/2018
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	585.65	0.00
tblFireplaces	NumberNoFireplace	68.90	0.00
tblFireplaces	NumberWood	34.45	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	AcresOfGrading	2.50	0.80
tblGrading	MaterialExported	0.00	22,233.00
tblGrading	MaterialExported	0.00	250.00
tblLandUse	LandUseSquareFeet	689,000.00	727,947.00
tblLandUse	LotAcreage	10.77	0.81
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	LotAcreage	8.98	0.00
tblLandUse	Population	1,971.00	1,062.00
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblSequestration	NumberOfNewTrees	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblWoodstoves	NumberCatalytic	34.45	0.00
tblWoodstoves	NumberNoncatalytic	34.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.4642	3.1754	5.2984	0.0108	0.6128	0.1318	0.7445	0.1724	0.1225	0.2949	0.0000	893.3278	893.3278	0.0648	0.0000	894.6876
2017	0.6455	3.7430	7.9992	0.0174	1.0714	0.1463	1.2178	0.2868	0.1350	0.4218	0.0000	1,371.6263	1,371.6263	0.0903	0.0000	1,373.5217
2018	1.7748	0.5864	1.4613	3.4800e-003	0.2253	0.0279	0.2532	0.0601	0.0267	0.0867	0.0000	260.2853	260.2853	0.0170	0.0000	260.6431
Total	**2.8846**	**7.5048**	**14.7589**	**0.0317**	**1.9095**	**0.3060**	**2.2155**	**0.5193**	**0.2841**	**0.8034**	**0.0000**	**2,525.2394**	**2,525.2394**	**0.1721**	**0.0000**	**2,528.8524**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.4642	3.1754	5.2984	0.0108	0.5933	0.1318	0.7250	0.1622	0.1225	0.2847	0.0000	893.3277	893.3277	0.0648	0.0000	894.6874
2017	0.6455	3.7430	7.9992	0.0174	1.0714	0.1463	1.2178	0.2868	0.1350	0.4218	0.0000	1,371.6261	1,371.6261	0.0903	0.0000	1,373.5216
2018	1.7748	0.5864	1.4613	3.4800e-003	0.2253	0.0279	0.2532	0.0601	0.0267	0.0867	0.0000	260.2852	260.2852	0.0170	0.0000	260.6430
Total	**2.8846**	**7.5048**	**14.7589**	**0.0317**	**1.8900**	**0.3060**	**2.1960**	**0.5091**	**0.2841**	**0.7931**	**0.0000**	**2,525.2390**	**2,525.2390**	**0.1721**	**0.0000**	**2,528.8520**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**1.02**	**0.00**	**0.88**	**1.97**	**0.00**	**1.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1516	0.0832	7.1689	3.8000e-004		0.0391	0.0391		0.0391	0.0391	0.0000	11.6319	11.6319	0.0116	0.0000	11.8749
Energy	0.0642	0.5486	0.2343	3.5000e-003		0.0444	0.0444		0.0444	0.0444	0.0000	3,999.8551	3,999.8551	0.0916	0.0281	4,010.4865
Mobile	3.1244	9.5466	36.1155	0.0961	6.5582	0.1358	6.6939	1.7549	0.1251	1.8800	0.0000	7,204.4591	7,204.4591	0.2724	0.0000	7,210.1797
Waste						0.0000	0.0000		0.0000	0.0000	69.2301	0.0000	69.2301	4.0914	0.0000	155.1490
Water						0.0000	0.0000		0.0000	0.0000	14.7814	519.4648	534.2462	1.5305	0.0384	578.2857
Total	**8.3402**	**10.1784**	**43.5186**	**0.1000**	**6.5582**	**0.2192**	**6.7774**	**1.7549**	**0.2085**	**1.9635**	**84.0115**	**11,735.4109**	**11,819.4224**	**5.9975**	**0.0665**	**11,965.9758**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1516	0.0832	7.1689	3.8000e-004		0.0391	0.0391		0.0391	0.0391	0.0000	11.6319	11.6319	0.0116	0.0000	11.8749
Energy	0.0536	0.4584	0.1957	2.9300e-003		0.0371	0.0371		0.0371	0.0371	0.0000	3,423.1586	3,423.1586	0.0785	0.0239	3,432.2044
Mobile	2.8768	7.5672	29.8468	0.0735	4.9678	0.1048	5.0725	1.3294	0.0965	1.4259	0.0000	5,504.4133	5,504.4133	0.2119	0.0000	5,508.8624
Waste						0.0000	0.0000		0.0000	0.0000	34.6150	0.0000	34.6150	2.0457	0.0000	77.5745
Water						0.0000	0.0000		0.0000	0.0000	11.8252	440.8103	452.6354	1.2248	0.0308	487.8989
Total	**8.0821**	**8.1087**	**37.2114**	**0.0768**	**4.9678**	**0.1809**	**5.1487**	**1.3294**	**0.1727**	**1.5020**	**46.4402**	**9,380.0141**	**9,426.4543**	**3.5724**	**0.0547**	**9,518.4151**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.09**	**20.33**	**14.49**	**23.24**	**24.25**	**17.46**	**24.03**	**24.25**	**17.18**	**23.50**	**44.72**	**20.07**	**20.25**	**40.44**	**17.79**	**20.45**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	10.6200
Total	**10.6200**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2016	3/7/2016	5	5	
2	Grading	Grading	3/8/2016	6/27/2016	5	80	
3	Building Construction	Building Construction	6/28/2016	2/5/2018	5	420	
4	Architectural Coating	Architectural Coating	2/6/2018	9/17/2018	5	160	
5	Paving	Paving	9/17/2018	9/28/2018	5	10	

Acres of Grading (Site Preparation Phase): 0.8

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 690,525; Residential Outdoor: 230,175; Non-Residential Indoor: 41,543; Non-Residential Outdoor: 13,844 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	31.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	10.00	0.00	2,779.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	671.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	134.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.4000e-004	0.0000	4.4000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-003	0.0341	0.0184	2.0000e-005		2.0800e-003	2.0800e-003		1.9200e-003	1.9200e-003	0.0000	2.2069	2.2069	6.7000e-004	0.0000	2.2209
Total	**3.4000e-003**	**0.0341**	**0.0184**	**2.0000e-005**	**4.4000e-004**	**2.0800e-003**	**2.5200e-003**	**5.0000e-005**	**1.9200e-003**	**1.9700e-003**	**0.0000**	**2.2069**	**2.2069**	**6.7000e-004**	**0.0000**	**2.2209**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	4.5200e-003	3.4000e-003	1.0000e-005	2.7000e-004	7.0000e-005	3.3000e-004	7.0000e-005	6.0000e-005	1.3000e-004	0.0000	1.0452	1.0452	1.0000e-005	0.0000	1.0454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1285	0.1285	1.0000e-005	0.0000	0.1286
Total	**3.3000e-004**	**4.5900e-003**	**4.1700e-003**	**1.0000e-005**	**4.1000e-004**	**7.0000e-005**	**4.7000e-004**	**1.1000e-004**	**6.0000e-005**	**1.7000e-004**	**0.0000**	**1.1737**	**1.1737**	**2.0000e-005**	**0.0000**	**1.1740**

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.7000e-004	0.0000	1.7000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-003	0.0341	0.0184	2.0000e-005		2.0800e-003	2.0800e-003		1.9200e-003	1.9200e-003	0.0000	2.2069	2.2069	6.7000e-004	0.0000	2.2209
Total	**3.4000e-003**	**0.0341**	**0.0184**	**2.0000e-005**	**1.7000e-004**	**2.0800e-003**	**2.2500e-003**	**2.0000e-005**	**1.9200e-003**	**1.9400e-003**	**0.0000**	**2.2069**	**2.2069**	**6.7000e-004**	**0.0000**	**2.2209**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	4.5200e-003	3.4000e-003	1.0000e-005	2.7000e-004	7.0000e-005	3.3000e-004	7.0000e-005	6.0000e-005	1.3000e-004	0.0000	1.0452	1.0452	1.0000e-005	0.0000	1.0454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1285	0.1285	1.0000e-005	0.0000	0.1286
Total	**3.3000e-004**	**4.5900e-003**	**4.1700e-003**	**1.0000e-005**	**4.1000e-004**	**7.0000e-005**	**4.7000e-004**	**1.1000e-004**	**6.0000e-005**	**1.7000e-004**	**0.0000**	**1.1737**	**1.1737**	**2.0000e-005**	**0.0000**	**1.1740**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0315	0.0000	0.0315	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0680	0.6268	0.4853	6.9000e-004		0.0409	0.0409		0.0387	0.0387	0.0000	63.2681	63.2681	0.0147	0.0000	63.5764
Total	**0.0680**	**0.6268**	**0.4853**	**6.9000e-004**	**0.0315**	**0.0409**	**0.0724**	**0.0168**	**0.0387**	**0.0555**	**0.0000**	**63.2681**	**63.2681**	**0.0147**	**0.0000**	**63.5764**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0249	0.4053	0.3044	1.0300e-003	0.0238	5.9500e-003	0.0298	6.5300e-003	5.4800e-003	0.0120	0.0000	93.6960	93.6960	6.8000e-004	0.0000	93.7102
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-003	2.3600e-003	0.0245	5.0000e-005	4.3900e-003	4.0000e-005	4.4300e-003	1.1700e-003	3.0000e-005	1.2000e-003	0.0000	4.1116	4.1116	2.2000e-004	0.0000	4.1162
Total	**0.0265**	**0.4077**	**0.3289**	**1.0800e-003**	**0.0282**	**5.9900e-003**	**0.0342**	**7.7000e-003**	**5.5100e-003**	**0.0132**	**0.0000**	**97.8076**	**97.8076**	**9.0000e-004**	**0.0000**	**97.8264**

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0123	0.0000	0.0123	6.5400e-003	0.0000	6.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0680	0.6268	0.4853	6.9000e-004		0.0409	0.0409		0.0387	0.0387	0.0000	63.2680	63.2680	0.0147	0.0000	63.5763
Total	**0.0680**	**0.6268**	**0.4853**	**6.9000e-004**	**0.0123**	**0.0409**	**0.0532**	**6.5400e-003**	**0.0387**	**0.0453**	**0.0000**	**63.2680**	**63.2680**	**0.0147**	**0.0000**	**63.5763**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0249	0.4053	0.3044	1.0300e-003	0.0238	5.9500e-003	0.0298	6.5300e-003	5.4800e-003	0.0120	0.0000	93.6960	93.6960	6.8000e-004	0.0000	93.7102
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-003	2.3600e-003	0.0245	5.0000e-005	4.3900e-003	4.0000e-005	4.4300e-003	1.1700e-003	3.0000e-005	1.2000e-003	0.0000	4.1116	4.1116	2.2000e-004	0.0000	4.1162
Total	**0.0265**	**0.4077**	**0.3289**	**1.0800e-003**	**0.0282**	**5.9900e-003**	**0.0342**	**7.7000e-003**	**5.5100e-003**	**0.0132**	**0.0000**	**97.8076**	**97.8076**	**9.0000e-004**	**0.0000**	**97.8264**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1005	0.9678	0.5915	8.5000e-004		0.0650	0.0650		0.0599	0.0599	0.0000	77.7751	77.7751	0.0222	0.0000	78.2422
Total	**0.1005**	**0.9678**	**0.5915**	**8.5000e-004**		**0.0650**	**0.0650**		**0.0599**	**0.0599**	**0.0000**	**77.7751**	**77.7751**	**0.0222**	**0.0000**	**78.2422**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0853	0.8698	1.1166	2.0800e-003	0.0590	0.0136	0.0725	0.0168	0.0125	0.0293	0.0000	188.9844	188.9844	1.3800e-003	0.0000	189.0134
Worker	0.1803	0.2647	2.7536	6.0600e-003	0.4932	4.2000e-003	0.4974	0.1310	3.8600e-003	0.1349	0.0000	462.1121	462.1121	0.0249	0.0000	462.6344
Total	**0.2655**	**1.1345**	**3.8702**	**8.1400e-003**	**0.5522**	**0.0178**	**0.5700**	**0.1478**	**0.0163**	**0.1642**	**0.0000**	**651.0965**	**651.0965**	**0.0263**	**0.0000**	**651.6477**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1005	0.9678	0.5915	8.5000e-004		0.0650	0.0650		0.0599	0.0599	0.0000	77.7750	77.7750	0.0222	0.0000	78.2422
Total	**0.1005**	**0.9678**	**0.5915**	**8.5000e-004**		**0.0650**	**0.0650**		**0.0599**	**0.0599**	**0.0000**	**77.7750**	**77.7750**	**0.0222**	**0.0000**	**78.2422**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0853	0.8698	1.1166	2.0800e-003	0.0590	0.0136	0.0725	0.0168	0.0125	0.0293	0.0000	188.9844	188.9844	1.3800e-003	0.0000	189.0134
Worker	0.1803	0.2647	2.7536	6.0600e-003	0.4932	4.2000e-003	0.4974	0.1310	3.8600e-003	0.1349	0.0000	462.1121	462.1121	0.0249	0.0000	462.6344
Total	**0.2655**	**1.1345**	**3.8702**	**8.1400e-003**	**0.5522**	**0.0178**	**0.5700**	**0.1478**	**0.0163**	**0.1642**	**0.0000**	**651.0965**	**651.0965**	**0.0263**	**0.0000**	**651.6477**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1809	1.7434	1.1253	1.6600e-003		0.1150	0.1150		0.1061	0.1061	0.0000	148.6633	148.6633	0.0431	0.0000	149.5692
Total	**0.1809**	**1.7434**	**1.1253**	**1.6600e-003**		**0.1150**	**0.1150**		**0.1061**	**0.1061**	**0.0000**	**148.6633**	**148.6633**	**0.0431**	**0.0000**	**149.5692**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1513	1.5359	2.0531	4.0300e-003	0.1144	0.0235	0.1379	0.0327	0.0216	0.0543	0.0000	360.7495	360.7495	2.5900e-003	0.0000	360.8038
Worker	0.3133	0.4638	4.8208	0.0118	0.9570	7.8400e-003	0.9649	0.2542	7.2300e-003	0.2614	0.0000	862.2134	862.2134	0.0445	0.0000	863.1487
Total	**0.4646**	**1.9996**	**6.8739**	**0.0158**	**1.0715**	**0.0313**	**1.1028**	**0.2868**	**0.0288**	**0.3157**	**0.0000**	**1,222.9629**	**1,222.9629**	**0.0471**	**0.0000**	**1,223.9525**

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1809	1.7434	1.1253	1.6600e-003		0.1150	0.1150		0.1061	0.1061	0.0000	148.6632	148.6632	0.0431	0.0000	149.5690
Total	**0.1809**	**1.7434**	**1.1253**	**1.6600e-003**		**0.1150**	**0.1150**		**0.1061**	**0.1061**	**0.0000**	**148.6632**	**148.6632**	**0.0431**	**0.0000**	**149.5690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1513	1.5359	2.0531	4.0300e-003	0.1144	0.0235	0.1379	0.0327	0.0216	0.0543	0.0000	360.7495	360.7495	2.5900e-003	0.0000	360.8038
Worker	0.3133	0.4638	4.8208	0.0118	0.9570	7.8400e-003	0.9649	0.2542	7.2300e-003	0.2614	0.0000	862.2134	862.2134	0.0445	0.0000	863.1487
Total	**0.4646**	**1.9996**	**6.8739**	**0.0158**	**1.0715**	**0.0313**	**1.1028**	**0.2868**	**0.0288**	**0.3157**	**0.0000**	**1,222.9629**	**1,222.9629**	**0.0471**	**0.0000**	**1,223.9525**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1520	0.1084	1.7000e-004		9.5500e-003	9.5500e-003		8.8100e-003	8.8100e-003	0.0000	14.6389	14.6389	4.3100e-003	0.0000	14.7294
Total	**0.0156**	**0.1520**	**0.1084**	**1.7000e-004**		**9.5500e-003**	**9.5500e-003**		**8.8100e-003**	**8.8100e-003**	**0.0000**	**14.6389**	**14.6389**	**4.3100e-003**	**0.0000**	**14.7294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0142	0.1410	0.1967	4.0000e-004	0.0114	2.2100e-003	0.0137	3.2700e-003	2.0400e-003	5.3000e-003	0.0000	35.4697	35.4697	2.6000e-004	0.0000	35.4751
Worker	0.0281	0.0421	0.4366	1.1700e-003	0.0957	7.6000e-004	0.0965	0.0254	7.1000e-004	0.0261	0.0000	83.0031	83.0031	4.1300e-003	0.0000	83.0899
Total	**0.0423**	**0.1830**	**0.6333**	**1.5700e-003**	**0.1071**	**2.9700e-003**	**0.1101**	**0.0287**	**2.7500e-003**	**0.0314**	**0.0000**	**118.4728**	**118.4728**	**4.3900e-003**	**0.0000**	**118.5650**

3.4 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1520	0.1084	1.7000e-004		9.5500e-003	9.5500e-003		8.8100e-003	8.8100e-003	0.0000	14.6389	14.6389	4.3100e-003	0.0000	14.7294
Total	**0.0156**	**0.1520**	**0.1084**	**1.7000e-004**		**9.5500e-003**	**9.5500e-003**		**8.8100e-003**	**8.8100e-003**	**0.0000**	**14.6389**	**14.6389**	**4.3100e-003**	**0.0000**	**14.7294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0142	0.1410	0.1967	4.0000e-004	0.0114	2.2100e-003	0.0137	3.2700e-003	2.0400e-003	5.3000e-003	0.0000	35.4697	35.4697	2.6000e-004	0.0000	35.4751
Worker	0.0281	0.0421	0.4366	1.1700e-003	0.0957	7.6000e-004	0.0965	0.0254	7.1000e-004	0.0261	0.0000	83.0031	83.0031	4.1300e-003	0.0000	83.0899
Total	**0.0423**	**0.1830**	**0.6333**	**1.5700e-003**	**0.1071**	**2.9700e-003**	**0.1101**	**0.0287**	**2.7500e-003**	**0.0314**	**0.0000**	**118.4728**	**118.4728**	**4.3900e-003**	**0.0000**	**118.5650**

3.5 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6545					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0239	0.1605	0.1483	2.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	20.4261	20.4261	1.9400e-003	0.0000	20.4668
Total	**1.6784**	**0.1605**	**0.1483**	**2.4000e-004**		**0.0120**	**0.0120**		**0.0120**	**0.0120**	**0.0000**	**20.4261**	**20.4261**	**1.9400e-003**	**0.0000**	**20.4668**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0517	0.5366	1.4400e-003	0.1176	9.4000e-004	0.1186	0.0312	8.7000e-004	0.0321	0.0000	102.0054	102.0054	5.0800e-003	0.0000	102.1121
Total	**0.0346**	**0.0517**	**0.5366**	**1.4400e-003**	**0.1176**	**9.4000e-004**	**0.1186**	**0.0312**	**8.7000e-004**	**0.0321**	**0.0000**	**102.0054**	**102.0054**	**5.0800e-003**	**0.0000**	**102.1121**

3.5 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6545					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0239	0.1605	0.1483	2.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	20.4260	20.4260	1.9400e-003	0.0000	20.4668
Total	**1.6784**	**0.1605**	**0.1483**	**2.4000e-004**		**0.0120**	**0.0120**		**0.0120**	**0.0120**	**0.0000**	**20.4260**	**20.4260**	**1.9400e-003**	**0.0000**	**20.4668**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0517	0.5366	1.4400e-003	0.1176	9.4000e-004	0.1186	0.0312	8.7000e-004	0.0321	0.0000	102.0054	102.0054	5.0800e-003	0.0000	102.1121
Total	**0.0346**	**0.0517**	**0.5366**	**1.4400e-003**	**0.1176**	**9.4000e-004**	**0.1186**	**0.0312**	**8.7000e-004**	**0.0321**	**0.0000**	**102.0054**	**102.0054**	**5.0800e-003**	**0.0000**	**102.1121**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8900e-003	0.0390	0.0322	5.0000e-005		2.3600e-003	2.3600e-003		2.1800e-003	2.1800e-003	0.0000	4.2663	4.2663	1.2900e-003	0.0000	4.2934
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8900e-003**	**0.0390**	**0.0322**	**5.0000e-005**		**2.3600e-003**	**2.3600e-003**		**2.1800e-003**	**2.1800e-003**	**0.0000**	**4.2663**	**4.2663**	**1.2900e-003**	**0.0000**	**4.2934**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	2.4000e-004	2.5000e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4758	0.4758	2.0000e-005	0.0000	0.4763
Total	**1.6000e-004**	**2.4000e-004**	**2.5000e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4758**	**0.4758**	**2.0000e-005**	**0.0000**	**0.4763**

3.6 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8900e-003	0.0390	0.0322	5.0000e-005		2.3600e-003	2.3600e-003		2.1800e-003	2.1800e-003	0.0000	4.2663	4.2663	1.2900e-003	0.0000	4.2934
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8900e-003**	**0.0390**	**0.0322**	**5.0000e-005**		**2.3600e-003**	**2.3600e-003**		**2.1800e-003**	**2.1800e-003**	**0.0000**	**4.2663**	**4.2663**	**1.2900e-003**	**0.0000**	**4.2934**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	2.4000e-004	2.5000e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4758	0.4758	2.0000e-005	0.0000	0.4763
Total	**1.6000e-004**	**2.4000e-004**	**2.5000e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4758**	**0.4758**	**2.0000e-005**	**0.0000**	**0.4763**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.8768	7.5672	29.8468	0.0735	4.9678	0.1048	5.0725	1.3294	0.0965	1.4259	0.0000	5,504.4133	5,504.4133	0.2119	0.0000	5,508.8624
Unmitigated	3.1244	9.5466	36.1155	0.0961	6.5582	0.1358	6.6939	1.7549	0.1251	1.8800	0.0000	7,204.4591	7,204.4591	0.2724	0.0000	7,210.1797

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse High Rise	4,540.51	4,933.24	4182.23	15,532,430	11,765,659
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	1,017.72	965.36	469.13	1,772,974	1,343,010
Total	5,558.23	5,898.60	4,651.36	17,305,404	13,108,669

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512137	0.059943	0.180601	0.139123	0.042256	0.006647	0.016115	0.031670	0.001940	0.002502	0.004362	0.000588	0.002117

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,892.4530	2,892.4530	0.0683	0.0141	2,898.2691
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,364.6269	3,364.6269	0.0795	0.0164	3,371.3924
NaturalGas Mitigated	0.0536	0.4584	0.1957	2.9300e-003		0.0371	0.0371		0.0371	0.0371	0.0000	530.7056	530.7056	0.0102	9.7300e-003	533.9354
NaturalGas Unmitigated	0.0642	0.5486	0.2343	3.5000e-003		0.0444	0.0444		0.0444	0.0444	0.0000	635.2282	635.2282	0.0122	0.0117	639.0941

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	39037.1	2.1000e-004	1.9100e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0832	2.0832	4.0000e-005	4.0000e-005	2.0959
Condo/Townhouse High Rise	1.18647e+007	0.0640	0.5467	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442	0.0000	633.1451	633.1451	0.0121	0.0116	636.9983
Total		**0.0642**	**0.5486**	**0.2343**	**3.5000e-003**		**0.0444**	**0.0444**		**0.0444**	**0.0444**	**0.0000**	**635.2282**	**635.2282**	**0.0122**	**0.0117**	**639.0941**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	33480.1	1.8000e-004	1.6400e-003	1.3800e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7866	1.7866	3.0000e-005	3.0000e-005	1.7975
Condo/Townhouse High Rise	9.91157e+006	0.0534	0.4567	0.1943	2.9200e-003		0.0369	0.0369		0.0369	0.0369	0.0000	528.9190	528.9190	0.0101	9.7000e-003	532.1379
Total		**0.0536**	**0.4584**	**0.1957**	**2.9300e-003**		**0.0371**	**0.0371**		**0.0371**	**0.0371**	**0.0000**	**530.7056**	**530.7056**	**0.0102**	**9.7300e-003**	**533.9354**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse High Rise	3.00208e+006	1,672.0449	0.0395	8.1700e-003	1,675.4070
Enclosed Parking with Elevator	2.69061e+006	1,498.5652	0.0354	7.3200e-003	1,501.5784
Strip Mall	348349	194.0168	4.5800e-003	9.5000e-004	194.4070
Total		**3,364.6269**	**0.0795**	**0.0164**	**3,371.3924**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse High Rise	2.7321e+006	1,521.6765	0.0359	7.4400e-003	1,524.7363
Enclosed Parking with Elevator	2.16766e+006	1,207.3010	0.0285	5.9000e-003	1,209.7286
Strip Mall	293513	163.4755	3.8600e-003	8.0000e-004	163.8042
Total		**2,892.4530**	**0.0683**	**0.0141**	**2,898.2691**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1516	0.0832	7.1689	3.8000e-004		0.0391	0.0391		0.0391	0.0391	0.0000	11.6319	11.6319	0.0116	0.0000	11.8749
Unmitigated	5.1516	0.0832	7.1689	3.8000e-004		0.0391	0.0391		0.0391	0.0391	0.0000	11.6319	11.6319	0.0116	0.0000	11.8749

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.1559					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2218	0.0832	7.1689	3.8000e-004		0.0391	0.0391		0.0391	0.0391	0.0000	11.6319	11.6319	0.0116	0.0000	11.8749
Total	**5.1516**	**0.0832**	**7.1689**	**3.8000e-004**		**0.0391**	**0.0391**		**0.0391**	**0.0391**	**0.0000**	**11.6319**	**11.6319**	**0.0116**	**0.0000**	**11.8749**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.1559					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2218	0.0832	7.1689	3.8000e-004		0.0391	0.0391		0.0391	0.0391	0.0000	11.6319	11.6319	0.0116	0.0000	11.8749
Total	**5.1516**	**0.0832**	**7.1689**	**3.8000e-004**		**0.0391**	**0.0391**		**0.0391**	**0.0391**	**0.0000**	**11.6319**	**11.6319**	**0.0116**	**0.0000**	**11.8749**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	452.6354	1.2248	0.0308	487.8989
Unmitigated	534.2462	1.5305	0.0384	578.2857

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse High Rise	44.8911 / 28.3009	514.9228	1.4746	0.0370	557.3551
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.70071 / 1.04237	19.3234	0.0559	1.4000e-003	20.9306
Total		**534.2462**	**1.5305**	**0.0384**	**578.2857**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse High Rise	35.9129 / 26.5746	436.2802	1.1800	0.0297	470.2568
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.36056 / 0.978783	16.3553	0.0447	1.1200e-003	17.6421
Total		**452.6354**	**1.2247**	**0.0308**	**487.8989**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	34.6150	2.0457	0.0000	77.5745
Unmitigated	69.2301	4.0914	0.0000	155.1490

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse High Rise	316.94	64.3360	3.8022	0.0000	144.1810
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	24.11	4.8941	0.2892	0.0000	10.9680
Total		**69.2301**	**4.0914**	**0.0000**	**155.1490**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse High Rise	158.47	32.1680	1.9011	0.0000	72.0905
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	12.055	2.4471	0.1446	0.0000	5.4840
Total		**34.6150**	**2.0457**	**0.0000**	**77.5745**

9.0 Operational Offroad

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

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	10.6200	0.0000	0.0000	10.6200

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	15	10.6200	0.0000	0.0000	10.6200
Total		**10.6200**	**0.0000**	**0.0000**	**10.6200**

Apex II Revised 12 23 2015

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse High Rise	689.00	Dwelling Unit	0.81	727,947.00	1062
Strip Mall	22.96	1000sqft	0.00	22,963.00	0
Enclosed Parking with Elevator	998.00	Space	0.00	399,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Operational Project includes Phase I (Tower I and Loft Blgd) and Phase II (Tower2).

Construction Phase - Construction schedule assumes approx. 30 months.

Off-road Equipment - Grading phase equipment to add 1 excavator and 2 loaders/tractors/backhoes (Grading footprint is 14,700sf).

Grading - Site Prep includes entire lot area of 35,594 sf; Grading area is limited to parking garage footprint of 14,700 sf.

Woodstoves - No woodstoves or fireplaces are proposed.

Sequestration - 15 Trees per Site Plan.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Energy mitigation measures reflect City of LA Green Building mandates for high rise residential.

Water Mitigation -

Waste Mitigation -

Off-road Equipment - Site Prep assumes 1 tractor/backhoe. (deleted 1 grader)

Off-road Equipment - Added cement mortar mixer for bldg. construction phase

Off-road Equipment -

Off-road Equipment - Changed cement mortar mixer to 1 for paving.

Architectural Coating - Architectural coating surface area was modified to reflect only Phase II construction as Phase I is completed.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	211,082.00	13,844.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	633,245.00	41,543.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	491,364.00	230,175.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,474,093.00	690,525.00
tblConstructionPhase	NumDays	5.00	160.00
tblConstructionPhase	NumDays	100.00	420.00
tblConstructionPhase	NumDays	2.00	80.00
tblConstructionPhase	NumDays	5.00	10.00

tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/1/2018	9/28/2018
tblConstructionPhase	PhaseStartDate	9/18/2018	9/17/2018
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	585.65	0.00
tblFireplaces	NumberNoFireplace	68.90	0.00
tblFireplaces	NumberWood	34.45	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	AcresOfGrading	2.50	0.80
tblGrading	MaterialExported	0.00	22,233.00
tblGrading	MaterialExported	0.00	250.00
tblLandUse	LandUseSquareFeet	689,000.00	727,947.00
tblLandUse	LotAcreage	10.77	0.81
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	LotAcreage	8.98	0.00
tblLandUse	Population	1,971.00	1,062.00
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblSequestration	NumberOfNewTrees	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblWoodstoves	NumberCatalytic	34.45	0.00
tblWoodstoves	NumberNoncatalytic	34.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.4872	30.3567	66.6158	0.1389	8.3939	1.2338	9.6277	2.2436	1.1374	3.3810	0.0000	12,381.9174	12,381.9174	0.7976	0.0000	12,398.6662
2017	4.9977	27.8735	61.4610	0.1388	8.3942	1.1249	9.5191	2.2437	1.0374	3.2811	0.0000	12,006.9301	12,006.9301	0.7651	0.0000	12,022.9963
2018	22.2424	24.9403	56.9112	0.1388	8.3942	0.9628	9.3570	2.2437	0.8884	3.1321	0.0000	11,650.5265	11,650.5265	0.7375	0.0000	11,666.0138
Total	**32.7273**	**83.1705**	**184.9880**	**0.4165**	**25.1822**	**3.3216**	**28.5038**	**6.7310**	**3.0632**	**9.7942**	**0.0000**	**36,039.3740**	**36,039.3740**	**2.3001**	**0.0000**	**36,087.6763**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.4872	30.3567	66.6158	0.1389	8.3939	1.2338	9.6277	2.2436	1.1374	3.3810	0.0000	12,381.9174	12,381.9174	0.7976	0.0000	12,398.6662
2017	4.9977	27.8735	61.4610	0.1388	8.3942	1.1249	9.5191	2.2437	1.0374	3.2811	0.0000	12,006.9301	12,006.9301	0.7651	0.0000	12,022.9963
2018	22.2424	24.9403	56.9112	0.1388	8.3942	0.9628	9.3570	2.2437	0.8884	3.1321	0.0000	11,650.5265	11,650.5265	0.7375	0.0000	11,666.0138
Total	**32.7273**	**83.1705**	**184.9880**	**0.4165**	**25.1822**	**3.3216**	**28.5038**	**6.7310**	**3.0632**	**9.7942**	**0.0000**	**36,039.3740**	**36,039.3740**	**2.3001**	**0.0000**	**36,087.6763**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190
Energy	0.3517	3.0061	1.2836	0.0192		0.2430	0.2430		0.2430	0.2430		3,836.8178	3,836.8178	0.0735	0.0703	3,860.1681
Mobile	19.0252	53.1692	216.4610	0.5970	39.8581	0.8097	40.6678	10.6498	0.7460	11.3959		49,238.1901	49,238.1901	1.7933		49,275.8493
Total	**48.1642**	**56.8407**	**275.0956**	**0.6192**	**39.8581**	**1.3655**	**41.2236**	**10.6498**	**1.3019**	**11.9517**	**0.0000**	**53,177.5839**	**53,177.5839**	**1.9689**	**0.0703**	**53,240.7363**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190
Energy	0.2938	2.5115	1.0725	0.0160		0.2030	0.2030		0.2030	0.2030		3,205.4946	3,205.4946	0.0614	0.0588	3,225.0027
Mobile	17.5114	42.2413	175.8578	0.4561	30.1921	0.6247	30.8168	8.0672	0.5756	8.6427		37,613.1436	37,613.1436	1.3946		37,642.4294
Total	**46.5925**	**45.4182**	**234.2813**	**0.4751**	**30.1921**	**1.1405**	**31.3326**	**8.0672**	**1.0914**	**9.1585**	**0.0000**	**40,921.2142**	**40,921.2142**	**1.5581**	**0.0588**	**40,972.1510**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	3.26	20.10	14.84	23.27	24.25	16.48	23.99	24.25	16.17	23.37	0.00	23.05	23.05	20.87	16.45	23.04

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2016	3/7/2016	5	5	
2	Grading	Grading	3/8/2016	6/27/2016	5	80	
3	Building Construction	Building Construction	6/28/2016	2/5/2018	5	420	
4	Architectural Coating	Architectural Coating	2/6/2018	9/17/2018	5	160	
5	Paving	Paving	9/17/2018	9/28/2018	5	10	

Acres of Grading (Site Preparation Phase): 0.8

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 690,525; Residential Outdoor: 230,175; Non-Residential Indoor: 41,543; Non-Residential Outdoor: 13,844 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	31.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	10.00	0.00	2,779.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	671.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	134.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1753	0.0000	0.1753	0.0192	0.0000	0.0192			0.0000			0.0000
Off-Road	1.3593	13.6350	7.3401	9.3500e-003		0.8338	0.8338		0.7671	0.7671		973.0842	973.0842	0.2935		979.2481
Total	**1.3593**	**13.6350**	**7.3401**	**9.3500e-003**	**0.1753**	**0.8338**	**1.0091**	**0.0192**	**0.7671**	**0.7862**		**973.0842**	**973.0842**	**0.2935**		**979.2481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1069	1.7160	1.2064	4.5800e-003	0.1080	0.0265	0.1346	0.0296	0.0244	0.0540		461.3087	461.3087	3.3100e-003		461.3782
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0208	0.0260	0.3243	7.1000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		59.4791	59.4791	3.0500e-003		59.5432
Total	**0.1277**	**1.7420**	**1.5307**	**5.2900e-003**	**0.1639**	**0.0270**	**0.1909**	**0.0444**	**0.0249**	**0.0692**		**520.7879**	**520.7879**	**6.3600e-003**		**520.9213**

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0684	0.0000	0.0684	7.4800e-003	0.0000	7.4800e-003			0.0000			0.0000
Off-Road	1.3593	13.6350	7.3401	9.3500e-003		0.8338	0.8338		0.7671	0.7671	0.0000	973.0842	973.0842	0.2935		979.2481
Total	**1.3593**	**13.6350**	**7.3401**	**9.3500e-003**	**0.0684**	**0.8338**	**0.9021**	**7.4800e-003**	**0.7671**	**0.7745**	**0.0000**	**973.0842**	**973.0842**	**0.2935**		**979.2481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1069	1.7160	1.2064	4.5800e-003	0.1080	0.0265	0.1346	0.0296	0.0244	0.0540		461.3087	461.3087	3.3100e-003		461.3782
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0208	0.0260	0.3243	7.1000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		59.4791	59.4791	3.0500e-003		59.5432
Total	**0.1277**	**1.7420**	**1.5307**	**5.2900e-003**	**0.1639**	**0.0270**	**0.1909**	**0.0444**	**0.0249**	**0.0692**		**520.7879**	**520.7879**	**6.3600e-003**		**520.9213**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7882	0.0000	0.7882	0.4190	0.0000	0.4190			0.0000			0.0000
Off-Road	1.7004	15.6693	12.1332	0.0173		1.0219	1.0219		0.9679	0.9679		1,743.5287	1,743.5287	0.4045		1,752.0232
Total	**1.7004**	**15.6693**	**12.1332**	**0.0173**	**0.7882**	**1.0219**	**1.8101**	**0.4190**	**0.9679**	**1.3869**		**1,743.5287**	**1,743.5287**	**0.4045**		**1,752.0232**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5987	9.6142	6.7592	0.0256	0.6051	0.1487	0.7539	0.1657	0.1368	0.3025		2,584.6310	2,584.6310	0.0185		2,585.0201
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0521	0.6486	1.4200e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		118.9583	118.9583	6.1000e-003		119.0863
Total	**0.6403**	**9.6663**	**7.4078**	**0.0271**	**0.7169**	**0.1497**	**0.8666**	**0.1953**	**0.1377**	**0.3330**		**2,703.5893**	**2,703.5893**	**0.0246**		**2,704.1064**

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3074	0.0000	0.3074	0.1634	0.0000	0.1634			0.0000			0.0000
Off-Road	1.7004	15.6693	12.1332	0.0173		1.0219	1.0219		0.9679	0.9679	0.0000	1,743.5287	1,743.5287	0.4045		1,752.0232
Total	**1.7004**	**15.6693**	**12.1332**	**0.0173**	**0.3074**	**1.0219**	**1.3293**	**0.1634**	**0.9679**	**1.1313**	**0.0000**	**1,743.5287**	**1,743.5287**	**0.4045**		**1,752.0232**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5987	9.6142	6.7592	0.0256	0.6051	0.1487	0.7539	0.1657	0.1368	0.3025		2,584.6310	2,584.6310	0.0185		2,585.0201
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0521	0.6486	1.4200e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		118.9583	118.9583	6.1000e-003		119.0863
Total	**0.6403**	**9.6663**	**7.4078**	**0.0271**	**0.7169**	**0.1497**	**0.8666**	**0.1953**	**0.1377**	**0.3330**		**2,703.5893**	**2,703.5893**	**0.0246**		**2,704.1064**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4993	14.4442	8.8289	0.0128		0.9695	0.9695		0.8943	0.8943		1,279.5877	1,279.5877	0.3660		1,287.2733
Total	**1.4993**	**14.4442**	**8.8289**	**0.0128**		**0.9695**	**0.9695**		**0.8943**	**0.8943**		**1,279.5877**	**1,279.5877**	**0.3660**		**1,287.2733**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1945	12.4190	14.2637	0.0311	0.8937	0.2017	1.0954	0.2545	0.1854	0.4400		3,120.2307	3,120.2307	0.0224		3,120.7008
Worker	2.7934	3.4935	43.5233	0.0950	7.5002	0.0627	7.5629	1.9891	0.0576	2.0467		7,982.0990	7,982.0990	0.4092		7,990.6921
Total	**3.9879**	**15.9125**	**57.7869**	**0.1262**	**8.3939**	**0.2644**	**8.6582**	**2.2436**	**0.2431**	**2.4867**		**11,102.3297**	**11,102.3297**	**0.4316**		**11,111.3929**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4993	14.4442	8.8289	0.0128		0.9695	0.9695		0.8943	0.8943	0.0000	1,279.5877	1,279.5877	0.3660		1,287.2733
Total	**1.4993**	**14.4442**	**8.8289**	**0.0128**		**0.9695**	**0.9695**		**0.8943**	**0.8943**	**0.0000**	**1,279.5877**	**1,279.5877**	**0.3660**		**1,287.2733**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1945	12.4190	14.2637	0.0311	0.8937	0.2017	1.0954	0.2545	0.1854	0.4400		3,120.2307	3,120.2307	0.0224		3,120.7008
Worker	2.7934	3.4935	43.5233	0.0950	7.5002	0.0627	7.5629	1.9891	0.0576	2.0467		7,982.0990	7,982.0990	0.4092		7,990.6921
Total	**3.9879**	**15.9125**	**57.7869**	**0.1262**	**8.3939**	**0.2644**	**8.6582**	**2.2436**	**0.2431**	**2.4867**		**11,102.3297**	**11,102.3297**	**0.4316**		**11,111.3929**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3915	13.4107	8.6562	0.0128		0.8847	0.8847		0.8162	0.8162		1,260.5637	1,260.5637	0.3658		1,268.2448
Total	**1.3915**	**13.4107**	**8.6562**	**0.0128**		**0.8847**	**0.8847**		**0.8162**	**0.8162**		**1,260.5637**	**1,260.5637**	**0.3658**		**1,268.2448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0950	11.3079	13.4148	0.0311	0.8940	0.1800	1.0739	0.2546	0.1655	0.4201		3,069.7404	3,069.7404	0.0217		3,070.1950
Worker	2.5112	3.1549	39.3900	0.0950	7.5002	0.0603	7.5605	1.9891	0.0556	2.0447		7,676.6261	7,676.6261	0.3776		7,684.5566
Total	**3.6062**	**14.4628**	**52.8048**	**0.1261**	**8.3942**	**0.2403**	**8.6344**	**2.2437**	**0.2211**	**2.4649**		**10,746.3664**	**10,746.3664**	**0.3993**		**10,754.7516**

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3915	13.4107	8.6562	0.0128		0.8847	0.8847		0.8162	0.8162	0.0000	1,260.5637	1,260.5637	0.3658		1,268.2448
Total	**1.3915**	**13.4107**	**8.6562**	**0.0128**		**0.8847**	**0.8847**		**0.8162**	**0.8162**	**0.0000**	**1,260.5637**	**1,260.5637**	**0.3658**		**1,268.2448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0950	11.3079	13.4148	0.0311	0.8940	0.1800	1.0739	0.2546	0.1655	0.4201		3,069.7404	3,069.7404	0.0217		3,070.1950
Worker	2.5112	3.1549	39.3900	0.0950	7.5002	0.0603	7.5605	1.9891	0.0556	2.0447		7,676.6261	7,676.6261	0.3776		7,684.5566
Total	**3.6062**	**14.4628**	**52.8048**	**0.1261**	**8.3942**	**0.2403**	**8.6344**	**2.2437**	**0.2211**	**2.4649**		**10,746.3664**	**10,746.3664**	**0.3993**		**10,754.7516**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1961	11.6941	8.3406	0.0128		0.7345	0.7345		0.6780	0.6780		1,241.2814	1,241.2814	0.3655		1,248.9561
Total	**1.1961**	**11.6941**	**8.3406**	**0.0128**		**0.7345**	**0.7345**		**0.6780**	**0.6780**		**1,241.2814**	**1,241.2814**	**0.3655**		**1,248.9561**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0271	10.3841	12.7809	0.0310	0.8940	0.1696	1.0636	0.2546	0.1560	0.4106		3,018.2635	3,018.2635	0.0215		3,018.7154
Worker	2.2640	2.8621	35.7897	0.0950	7.5002	0.0587	7.5589	1.9891	0.0543	2.0434		7,390.9816	7,390.9816	0.3505		7,398.3423
Total	**3.2911**	**13.2462**	**48.5705**	**0.1260**	**8.3942**	**0.2283**	**8.6225**	**2.2437**	**0.2104**	**2.4541**		**10,409.2452**	**10,409.2452**	**0.3720**		**10,417.0577**

3.4 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1961	11.6941	8.3406	0.0128		0.7345	0.7345		0.6780	0.6780	0.0000	1,241.2814	1,241.2814	0.3655		1,248.9561
Total	**1.1961**	**11.6941**	**8.3406**	**0.0128**		**0.7345**	**0.7345**		**0.6780**	**0.6780**	**0.0000**	**1,241.2814**	**1,241.2814**	**0.3655**		**1,248.9561**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0271	10.3841	12.7809	0.0310	0.8940	0.1696	1.0636	0.2546	0.1560	0.4106		3,018.2635	3,018.2635	0.0215		3,018.7154
Worker	2.2640	2.8621	35.7897	0.0950	7.5002	0.0587	7.5589	1.9891	0.0543	2.0434		7,390.9816	7,390.9816	0.3505		7,398.3423
Total	**3.2911**	**13.2462**	**48.5705**	**0.1260**	**8.3942**	**0.2283**	**8.6225**	**2.2437**	**0.2104**	**2.4541**		**10,409.2452**	**10,409.2452**	**0.3720**		**10,417.0577**

3.5 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6809					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**20.9796**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4521	0.5716	7.1473	0.0190	1.4978	0.0117	1.5095	0.3972	0.0109	0.4081		1,475.9934	1,475.9934	0.0700		1,477.4633
Total	**0.4521**	**0.5716**	**7.1473**	**0.0190**	**1.4978**	**0.0117**	**1.5095**	**0.3972**	**0.0109**	**0.4081**		**1,475.9934**	**1,475.9934**	**0.0700**		**1,477.4633**

3.5 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6809					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**20.9796**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4521	0.5716	7.1473	0.0190	1.4978	0.0117	1.5095	0.3972	0.0109	0.4081		1,475.9934	1,475.9934	0.0700		1,477.4633
Total	**0.4521**	**0.5716**	**7.1473**	**0.0190**	**1.4978**	**0.0117**	**1.5095**	**0.3972**	**0.0109**	**0.4081**		**1,475.9934**	**1,475.9934**	**0.0700**		**1,477.4633**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7770	7.7949	6.4317	9.5000e-003		0.4724	0.4724		0.4354	0.4354		940.5528	940.5528	0.2850		946.5367
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7770**	**7.7949**	**6.4317**	**9.5000e-003**		**0.4724**	**0.4724**		**0.4354**	**0.4354**		**940.5528**	**940.5528**	**0.2850**		**946.5367**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0337	0.0427	0.5334	1.4200e-003	0.1118	8.8000e-004	0.1127	0.0296	8.1000e-004	0.0305		110.1488	110.1488	5.2200e-003		110.2585
Total	**0.0337**	**0.0427**	**0.5334**	**1.4200e-003**	**0.1118**	**8.8000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**110.1488**	**110.1488**	**5.2200e-003**		**110.2585**

3.6 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7770	7.7949	6.4317	9.5000e-003		0.4724	0.4724		0.4354	0.4354	0.0000	940.5528	940.5528	0.2850		946.5366
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7770**	**7.7949**	**6.4317**	**9.5000e-003**		**0.4724**	**0.4724**		**0.4354**	**0.4354**	**0.0000**	**940.5528**	**940.5528**	**0.2850**		**946.5366**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0337	0.0427	0.5334	1.4200e-003	0.1118	8.8000e-004	0.1127	0.0296	8.1000e-004	0.0305		110.1488	110.1488	5.2200e-003		110.2585
Total	**0.0337**	**0.0427**	**0.5334**	**1.4200e-003**	**0.1118**	**8.8000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**110.1488**	**110.1488**	**5.2200e-003**		**110.2585**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.5114	42.2413	175.8578	0.4561	30.1921	0.6247	30.8168	8.0672	0.5756	8.6427		37,613.1436	37,613.1436	1.3946		37,642.4294
Unmitigated	19.0252	53.1692	216.4610	0.5970	39.8581	0.8097	40.6678	10.6498	0.7460	11.3959		49,238.1901	49,238.1901	1.7933		49,275.8493

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse High Rise	4,540.51	4,933.24	4182.23	15,532,430	11,765,659
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	1,017.72	965.36	469.13	1,772,974	1,343,010
Total	5,558.23	5,898.60	4,651.36	17,305,404	13,108,669

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512137	0.059943	0.180601	0.139123	0.042256	0.006647	0.016115	0.031670	0.001940	0.002502	0.004362	0.000588	0.002117

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2938	2.5115	1.0725	0.0160		0.2030	0.2030		0.2030	0.2030		3,205.4946	3,205.4946	0.0614	0.0588	3,225.0027
NaturalGas Unmitigated	0.3517	3.0061	1.2836	0.0192		0.2430	0.2430		0.2430	0.2430		3,836.8178	3,836.8178	0.0735	0.0703	3,860.1681

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	106.951	1.1500e-003	0.0105	8.8100e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.5825	12.5825	2.4000e-004	2.3000e-004	12.6590
Condo/Townhouse High Rise	32506	0.3506	2.9957	1.2748	0.0191		0.2422	0.2422		0.2422	0.2422		3,824.2354	3,824.2354	0.0733	0.0701	3,847.5090
Total		**0.3517**	**3.0061**	**1.2836**	**0.0192**		**0.2430**	**0.2430**		**0.2430**	**0.2430**		**3,836.8178**	**3,836.8178**	**0.0735**	**0.0703**	**3,860.1681**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Strip Mall	0.0917262	9.9000e-004	8.9900e-003	7.5500e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004		10.7913	10.7913	2.1000e-004	2.0000e-004	10.8570
Condo/Townhouse High Rise	27.155	0.2929	2.5025	1.0649	0.0160		0.2023	0.2023		0.2023	0.2023		3,194.7032	3,194.7032	0.0612	0.0586	3,214.1457
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2938**	**2.5115**	**1.0725**	**0.0160**		**0.2030**	**0.2030**		**0.2030**	**0.2030**		**3,205.4945**	**3,205.4945**	**0.0614**	**0.0588**	**3,225.0027**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190
Unmitigated	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.2404					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	22.7722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7747	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128		102.5760	102.5760	0.1021		104.7190
Total	**28.7873**	**0.6654**	**57.3510**	**3.0100e-003**		**0.3128**	**0.3128**		**0.3128**	**0.3128**	**0.0000**	**102.5760**	**102.5760**	**0.1021**	**0.0000**	**104.7190**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.2404					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	22.7722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7747	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128		102.5760	102.5760	0.1021		104.7190
Total	**28.7873**	**0.6654**	**57.3510**	**3.0100e-003**		**0.3128**	**0.3128**		**0.3128**	**0.3128**	**0.0000**	**102.5760**	**102.5760**	**0.1021**	**0.0000**	**104.7190**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Vegetation

Apex II Revised 12 23 2015

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse High Rise	689.00	Dwelling Unit	0.81	727,947.00	1062
Strip Mall	22.96	1000sqft	0.00	22,963.00	0
Enclosed Parking with Elevator	998.00	Space	0.00	399,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Operational Project includes Phase I (Tower I and Loft Blgd) and Phase II (Tower2).

Construction Phase - Construction schedule assumes approx. 30 months.

Off-road Equipment - Grading phase equipment to add 1 excavator and 2 loaders/tractors/backhoes (Grading footprint is 14,700sf).

Grading - Site Prep includes entire lot area of 35,594 sf; Grading area is limited to parking garage footprint of 14,700 sf.

Woodstoves - No woodstoves or fireplaces are proposed.

Sequestration - 15 Trees per Site Plan.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Energy mitigation measures reflect City of LA Green Building mandates for high rise residential.

Water Mitigation -

Waste Mitigation -

Off-road Equipment - Site Prep assumes 1 tractor/backhoe. (deleted 1 grader)

Off-road Equipment - Added cement mortar mixer for bldg. construction phase

Off-road Equipment -

Off-road Equipment - Changed cement mortar mixer to 1 for paving.

Architectural Coating - Architectural coating surface area was modified to reflect only Phase II construction as Phase I is completed.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	211,082.00	13,844.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	633,245.00	41,543.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	491,364.00	230,175.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,474,093.00	690,525.00
tblConstructionPhase	NumDays	5.00	160.00
tblConstructionPhase	NumDays	100.00	420.00
tblConstructionPhase	NumDays	2.00	80.00
tblConstructionPhase	NumDays	5.00	10.00

tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/1/2018	9/28/2018
tblConstructionPhase	PhaseStartDate	9/18/2018	9/17/2018
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	585.65	0.00
tblFireplaces	NumberNoFireplace	68.90	0.00
tblFireplaces	NumberWood	34.45	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	AcresOfGrading	2.50	0.80
tblGrading	MaterialExported	0.00	22,233.00
tblGrading	MaterialExported	0.00	250.00
tblLandUse	LandUseSquareFeet	689,000.00	727,947.00
tblLandUse	LotAcreage	10.77	0.81
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	LotAcreage	8.98	0.00
tblLandUse	Population	1,971.00	1,062.00
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblSequestration	NumberOfNewTrees	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblWoodstoves	NumberCatalytic	34.45	0.00
tblWoodstoves	NumberNoncatalytic	34.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.6643	31.0143	66.0752	0.1327	8.3939	1.2359	9.6298	2.2436	1.1393	3.3829	0.0000	11,859.9852	11,859.9852	0.7982	0.0000	11,876.7480
2017	5.1490	28.4622	61.0908	0.1326	8.3942	1.1267	9.5209	2.2437	1.0390	3.2827	0.0000	11,503.3128	11,503.3128	0.7657	0.0000	11,519.3932
2018	22.2510	25.4712	56.6818	0.1325	8.3942	0.9644	9.3586	2.2437	0.8899	3.1336	0.0000	11,164.1248	11,164.1248	0.7382	0.0000	11,179.6267
Total	**33.0643**	**84.9477**	**183.8478**	**0.3979**	**25.1822**	**3.3271**	**28.5093**	**6.7310**	**3.0682**	**9.7992**	**0.0000**	**34,527.4228**	**34,527.4228**	**2.3021**	**0.0000**	**34,575.7678**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.6643	31.0143	66.0752	0.1327	8.3939	1.2359	9.6298	2.2436	1.1393	3.3829	0.0000	11,859.9852	11,859.9852	0.7982	0.0000	11,876.7480
2017	5.1490	28.4622	61.0908	0.1326	8.3942	1.1267	9.5209	2.2437	1.0390	3.2827	0.0000	11,503.3128	11,503.3128	0.7657	0.0000	11,519.3932
2018	22.2510	25.4712	56.6818	0.1325	8.3942	0.9644	9.3586	2.2437	0.8899	3.1336	0.0000	11,164.1248	11,164.1248	0.7382	0.0000	11,179.6267
Total	**33.0643**	**84.9477**	**183.8478**	**0.3979**	**25.1822**	**3.3271**	**28.5093**	**6.7310**	**3.0682**	**9.7992**	**0.0000**	**34,527.4228**	**34,527.4228**	**2.3021**	**0.0000**	**34,575.7678**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190
Energy	0.3517	3.0061	1.2836	0.0192		0.2430	0.2430		0.2430	0.2430		3,836.8178	3,836.8178	0.0735	0.0703	3,860.1681
Mobile	19.6191	55.8690	213.5161	0.5670	39.8581	0.8128	40.6709	10.6498	0.7489	11.3987		46,874.1235	46,874.1235	1.7950		46,911.8182
Total	**48.7580**	**59.5405**	**272.1507**	**0.5892**	**39.8581**	**1.3686**	**41.2267**	**10.6498**	**1.3047**	**11.9545**	**0.0000**	**50,813.5173**	**50,813.5173**	**1.9706**	**0.0703**	**50,876.7052**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190
Energy	0.2938	2.5115	1.0725	0.0160		0.2030	0.2030		0.2030	0.2030		3,205.4946	3,205.4946	0.0614	0.0588	3,225.0027
Mobile	18.1574	44.3024	177.1145	0.4333	30.1921	0.6278	30.8199	8.0672	0.5784	8.6455		35,809.6469	35,809.6469	1.3963		35,838.9682
Total	**47.2385**	**47.4793**	**235.5380**	**0.4524**	**30.1921**	**1.1436**	**31.3357**	**8.0672**	**1.0942**	**9.1614**	**0.0000**	**39,117.7174**	**39,117.7174**	**1.5597**	**0.0588**	**39,168.6898**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	3.12	20.26	13.45	23.23	24.25	16.44	23.99	24.25	16.13	23.36	0.00	23.02	23.02	20.85	16.45	23.01

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2016	3/7/2016	5	5	
2	Grading	Grading	3/8/2016	6/27/2016	5	80	
3	Building Construction	Building Construction	6/28/2016	2/5/2018	5	420	
4	Architectural Coating	Architectural Coating	2/6/2018	9/17/2018	5	160	
5	Paving	Paving	9/17/2018	9/28/2018	5	10	

Acres of Grading (Site Preparation Phase): 0.8

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 690,525; Residential Outdoor: 230,175; Non-Residential Indoor: 41,543; Non-Residential Outdoor: 13,844 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	31.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	10.00	0.00	2,779.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	671.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	134.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1753	0.0000	0.1753	0.0192	0.0000	0.0192			0.0000			0.0000
Off-Road	1.3593	13.6350	7.3401	9.3500e-003		0.8338	0.8338		0.7671	0.7671		973.0842	973.0842	0.2935		979.2481
Total	**1.3593**	**13.6350**	**7.3401**	**9.3500e-003**	**0.1753**	**0.8338**	**1.0091**	**0.0192**	**0.7671**	**0.7862**		**973.0842**	**973.0842**	**0.2935**		**979.2481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1129	1.7781	1.3822	4.5700e-003	0.1080	0.0266	0.1346	0.0296	0.0245	0.0541		460.2132	460.2132	3.3500e-003		460.2835
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0213	0.0286	0.2990	6.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.7848	55.7848	3.0500e-003		55.8488
Total	**0.1341**	**1.8067**	**1.6812**	**5.2300e-003**	**0.1639**	**0.0271**	**0.1910**	**0.0444**	**0.0249**	**0.0693**		**515.9979**	**515.9979**	**6.4000e-003**		**516.1323**

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0684	0.0000	0.0684	7.4800e-003	0.0000	7.4800e-003			0.0000			0.0000
Off-Road	1.3593	13.6350	7.3401	9.3500e-003		0.8338	0.8338		0.7671	0.7671	0.0000	973.0842	973.0842	0.2935		979.2481
Total	**1.3593**	**13.6350**	**7.3401**	**9.3500e-003**	**0.0684**	**0.8338**	**0.9021**	**7.4800e-003**	**0.7671**	**0.7745**	**0.0000**	**973.0842**	**973.0842**	**0.2935**		**979.2481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1129	1.7781	1.3822	4.5700e-003	0.1080	0.0266	0.1346	0.0296	0.0245	0.0541		460.2132	460.2132	3.3500e-003		460.2835
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0213	0.0286	0.2990	6.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.7848	55.7848	3.0500e-003		55.8488
Total	**0.1341**	**1.8067**	**1.6812**	**5.2300e-003**	**0.1639**	**0.0271**	**0.1910**	**0.0444**	**0.0249**	**0.0693**		**515.9979**	**515.9979**	**6.4000e-003**		**516.1323**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7882	0.0000	0.7882	0.4190	0.0000	0.4190			0.0000			0.0000
Off-Road	1.7004	15.6693	12.1332	0.0173		1.0219	1.0219		0.9679	0.9679		1,743.5287	1,743.5287	0.4045		1,752.0232
Total	**1.7004**	**15.6693**	**12.1332**	**0.0173**	**0.7882**	**1.0219**	**1.8101**	**0.4190**	**0.9679**	**1.3869**		**1,743.5287**	**1,743.5287**	**0.4045**		**1,752.0232**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6323	9.9624	7.7443	0.0256	0.6051	0.1491	0.7542	0.1657	0.1371	0.3028		2,578.4928	2,578.4928	0.0188		2,578.8870
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0426	0.0572	0.5980	1.3300e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		111.5695	111.5695	6.1000e-003		111.6976
Total	**0.6748**	**10.0196**	**8.3423**	**0.0269**	**0.7169**	**0.1500**	**0.8669**	**0.1953**	**0.1380**	**0.3333**		**2,690.0623**	**2,690.0623**	**0.0249**		**2,690.5846**

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3074	0.0000	0.3074	0.1634	0.0000	0.1634			0.0000			0.0000
Off-Road	1.7004	15.6693	12.1332	0.0173		1.0219	1.0219		0.9679	0.9679	0.0000	1,743.5287	1,743.5287	0.4045		1,752.0232
Total	**1.7004**	**15.6693**	**12.1332**	**0.0173**	**0.3074**	**1.0219**	**1.3293**	**0.1634**	**0.9679**	**1.1313**	**0.0000**	**1,743.5287**	**1,743.5287**	**0.4045**		**1,752.0232**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6323	9.9624	7.7443	0.0256	0.6051	0.1491	0.7542	0.1657	0.1371	0.3028		2,578.4928	2,578.4928	0.0188		2,578.8870
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0426	0.0572	0.5980	1.3300e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		111.5695	111.5695	6.1000e-003		111.6976
Total	**0.6748**	**10.0196**	**8.3423**	**0.0269**	**0.7169**	**0.1500**	**0.8669**	**0.1953**	**0.1380**	**0.3333**		**2,690.0623**	**2,690.0623**	**0.0249**		**2,690.5846**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4993	14.4442	8.8289	0.0128		0.9695	0.9695		0.8943	0.8943		1,279.5877	1,279.5877	0.3660		1,287.2733
Total	**1.4993**	**14.4442**	**8.8289**	**0.0128**		**0.9695**	**0.9695**		**0.8943**	**0.8943**		**1,279.5877**	**1,279.5877**	**0.3660**		**1,287.2733**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3093	12.7326	17.1204	0.0309	0.8937	0.2037	1.0974	0.2545	0.1874	0.4419		3,094.0830	3,094.0830	0.0231		3,094.5671
Worker	2.8557	3.8375	40.1259	0.0891	7.5002	0.0627	7.5629	1.9891	0.0576	2.0467		7,486.3145	7,486.3145	0.4092		7,494.9076
Total	**4.1650**	**16.5701**	**57.2463**	**0.1200**	**8.3939**	**0.2664**	**8.6603**	**2.2436**	**0.2450**	**2.4886**		**10,580.3976**	**10,580.3976**	**0.4322**		**10,589.4747**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4993	14.4442	8.8289	0.0128		0.9695	0.9695		0.8943	0.8943	0.0000	1,279.5877	1,279.5877	0.3660		1,287.2733
Total	**1.4993**	**14.4442**	**8.8289**	**0.0128**		**0.9695**	**0.9695**		**0.8943**	**0.8943**	**0.0000**	**1,279.5877**	**1,279.5877**	**0.3660**		**1,287.2733**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3093	12.7326	17.1204	0.0309	0.8937	0.2037	1.0974	0.2545	0.1874	0.4419		3,094.0830	3,094.0830	0.0231		3,094.5671
Worker	2.8557	3.8375	40.1259	0.0891	7.5002	0.0627	7.5629	1.9891	0.0576	2.0467		7,486.3145	7,486.3145	0.4092		7,494.9076
Total	**4.1650**	**16.5701**	**57.2463**	**0.1200**	**8.3939**	**0.2664**	**8.6603**	**2.2436**	**0.2450**	**2.4886**		**10,580.3976**	**10,580.3976**	**0.4322**		**10,589.4747**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3915	13.4107	8.6562	0.0128		0.8847	0.8847		0.8162	0.8162		1,260.5637	1,260.5637	0.3658		1,268.2448
Total	**1.3915**	**13.4107**	**8.6562**	**0.0128**		**0.8847**	**0.8847**		**0.8162**	**0.8162**		**1,260.5637**	**1,260.5637**	**0.3658**		**1,268.2448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1959	11.5869	16.2530	0.0309	0.8940	0.1817	1.0757	0.2546	0.1671	0.4218		3,043.9533	3,043.9533	0.0223		3,044.4221
Worker	2.5616	3.4646	36.1816	0.0890	7.5002	0.0603	7.5605	1.9891	0.0556	2.0447		7,198.7958	7,198.7958	0.3776		7,206.7263
Total	**3.7575**	**15.0515**	**52.4346**	**0.1199**	**8.3942**	**0.2420**	**8.6362**	**2.2437**	**0.2228**	**2.4665**		**10,242.7491**	**10,242.7491**	**0.4000**		**10,251.1484**

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3915	13.4107	8.6562	0.0128		0.8847	0.8847		0.8162	0.8162	0.0000	1,260.5637	1,260.5637	0.3658		1,268.2448
Total	**1.3915**	**13.4107**	**8.6562**	**0.0128**		**0.8847**	**0.8847**		**0.8162**	**0.8162**	**0.0000**	**1,260.5637**	**1,260.5637**	**0.3658**		**1,268.2448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1959	11.5869	16.2530	0.0309	0.8940	0.1817	1.0757	0.2546	0.1671	0.4218		3,043.9533	3,043.9533	0.0223		3,044.4221
Worker	2.5616	3.4646	36.1816	0.0890	7.5002	0.0603	7.5605	1.9891	0.0556	2.0447		7,198.7958	7,198.7958	0.3776		7,206.7263
Total	**3.7575**	**15.0515**	**52.4346**	**0.1199**	**8.3942**	**0.2420**	**8.6362**	**2.2437**	**0.2228**	**2.4665**		**10,242.7491**	**10,242.7491**	**0.4000**		**10,251.1484**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1961	11.6941	8.3406	0.0128		0.7345	0.7345		0.6780	0.6780		1,241.2814	1,241.2814	0.3655		1,248.9561
Total	**1.1961**	**11.6941**	**8.3406**	**0.0128**		**0.7345**	**0.7345**		**0.6780**	**0.6780**		**1,241.2814**	**1,241.2814**	**0.3655**		**1,248.9561**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1180	10.6349	15.5964	0.0308	0.8940	0.1712	1.0652	0.2546	0.1575	0.4121		2,992.8552	2,992.8552	0.0222		2,993.3216
Worker	2.3039	3.1422	32.7448	0.0890	7.5002	0.0587	7.5589	1.9891	0.0543	2.0434		6,929.9883	6,929.9883	0.3505		6,937.3490
Total	**3.4219**	**13.7771**	**48.3411**	**0.1198**	**8.3942**	**0.2300**	**8.6241**	**2.2437**	**0.2118**	**2.4556**		**9,922.8435**	**9,922.8435**	**0.3727**		**9,930.6706**

3.4 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1961	11.6941	8.3406	0.0128		0.7345	0.7345		0.6780	0.6780	0.0000	1,241.2814	1,241.2814	0.3655		1,248.9561
Total	**1.1961**	**11.6941**	**8.3406**	**0.0128**		**0.7345**	**0.7345**		**0.6780**	**0.6780**	**0.0000**	**1,241.2814**	**1,241.2814**	**0.3655**		**1,248.9561**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1180	10.6349	15.5964	0.0308	0.8940	0.1712	1.0652	0.2546	0.1575	0.4121		2,992.8552	2,992.8552	0.0222		2,993.3216
Worker	2.3039	3.1422	32.7448	0.0890	7.5002	0.0587	7.5589	1.9891	0.0543	2.0434		6,929.9883	6,929.9883	0.3505		6,937.3490
Total	**3.4219**	**13.7771**	**48.3411**	**0.1198**	**8.3942**	**0.2300**	**8.6241**	**2.2437**	**0.2118**	**2.4556**		**9,922.8435**	**9,922.8435**	**0.3727**		**9,930.6706**

3.5 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6809					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**20.9796**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4601	0.6275	6.5392	0.0178	1.4978	0.0117	1.5095	0.3972	0.0109	0.4081		1,383.9321	1,383.9321	0.0700		1,385.4020
Total	**0.4601**	**0.6275**	**6.5392**	**0.0178**	**1.4978**	**0.0117**	**1.5095**	**0.3972**	**0.0109**	**0.4081**		**1,383.9321**	**1,383.9321**	**0.0700**		**1,385.4020**

3.5 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6809					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**20.9796**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4601	0.6275	6.5392	0.0178	1.4978	0.0117	1.5095	0.3972	0.0109	0.4081		1,383.9321	1,383.9321	0.0700		1,385.4020
Total	**0.4601**	**0.6275**	**6.5392**	**0.0178**	**1.4978**	**0.0117**	**1.5095**	**0.3972**	**0.0109**	**0.4081**		**1,383.9321**	**1,383.9321**	**0.0700**		**1,385.4020**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7770	7.7949	6.4317	9.5000e-003		0.4724	0.4724		0.4354	0.4354		940.5528	940.5528	0.2850		946.5367
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7770**	**7.7949**	**6.4317**	**9.5000e-003**		**0.4724**	**0.4724**		**0.4354**	**0.4354**		**940.5528**	**940.5528**	**0.2850**		**946.5367**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0468	0.4880	1.3300e-003	0.1118	8.8000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.2785	103.2785	5.2200e-003		103.3882
Total	**0.0343**	**0.0468**	**0.4880**	**1.3300e-003**	**0.1118**	**8.8000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**103.2785**	**103.2785**	**5.2200e-003**		**103.3882**

3.6 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7770	7.7949	6.4317	9.5000e-003		0.4724	0.4724		0.4354	0.4354	0.0000	940.5528	940.5528	0.2850		946.5366
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7770**	**7.7949**	**6.4317**	**9.5000e-003**		**0.4724**	**0.4724**		**0.4354**	**0.4354**	**0.0000**	**940.5528**	**940.5528**	**0.2850**		**946.5366**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0468	0.4880	1.3300e-003	0.1118	8.8000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.2785	103.2785	5.2200e-003		103.3882
Total	**0.0343**	**0.0468**	**0.4880**	**1.3300e-003**	**0.1118**	**8.8000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**103.2785**	**103.2785**	**5.2200e-003**		**103.3882**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.1574	44.3024	177.1145	0.4333	30.1921	0.6278	30.8199	8.0672	0.5784	8.6455		35,809.6469	35,809.6469	1.3963		35,838.9682
Unmitigated	19.6191	55.8690	213.5161	0.5670	39.8581	0.8128	40.6709	10.6498	0.7489	11.3987		46,874.1235	46,874.1235	1.7950		46,911.8182

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse High Rise	4,540.51	4,933.24	4182.23	15,532,430	11,765,659
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	1,017.72	965.36	469.13	1,772,974	1,343,010
Total	5,558.23	5,898.60	4,651.36	17,305,404	13,108,669

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512137	0.059943	0.180601	0.139123	0.042256	0.006647	0.016115	0.031670	0.001940	0.002502	0.004362	0.000588	0.002117

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2938	2.5115	1.0725	0.0160		0.2030	0.2030		0.2030	0.2030		3,205.4946	3,205.4946	0.0614	0.0588	3,225.0027
NaturalGas Unmitigated	0.3517	3.0061	1.2836	0.0192		0.2430	0.2430		0.2430	0.2430		3,836.8178	3,836.8178	0.0735	0.0703	3,860.1681

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	106.951	1.1500e-003	0.0105	8.8100e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.5825	12.5825	2.4000e-004	2.3000e-004	12.6590
Condo/Townhouse High Rise	32506	0.3506	2.9957	1.2748	0.0191		0.2422	0.2422		0.2422	0.2422		3,824.2354	3,824.2354	0.0733	0.0701	3,847.5090
Total		**0.3517**	**3.0061**	**1.2836**	**0.0192**		**0.2430**	**0.2430**		**0.2430**	**0.2430**		**3,836.8178**	**3,836.8178**	**0.0735**	**0.0703**	**3,860.1681**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0917262	9.9000e-004	8.9900e-003	7.5500e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004		10.7913	10.7913	2.1000e-004	2.0000e-004	10.8570
Condo/Townhouse High Rise	27.155	0.2929	2.5025	1.0649	0.0160		0.2023	0.2023		0.2023	0.2023		3,194.7032	3,194.7032	0.0612	0.0586	3,214.1457
Total		**0.2938**	**2.5115**	**1.0725**	**0.0160**		**0.2030**	**0.2030**		**0.2030**	**0.2030**		**3,205.4945**	**3,205.4945**	**0.0614**	**0.0588**	**3,225.0027**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190
Unmitigated	28.7873	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128	0.0000	102.5760	102.5760	0.1021	0.0000	104.7190

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.2404					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	22.7722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7747	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128		102.5760	102.5760	0.1021		104.7190
Total	**28.7873**	**0.6654**	**57.3510**	**3.0100e-003**		**0.3128**	**0.3128**		**0.3128**	**0.3128**	**0.0000**	**102.5760**	**102.5760**	**0.1021**	**0.0000**	**104.7190**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.2404					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	22.7722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7747	0.6654	57.3510	3.0100e-003		0.3128	0.3128		0.3128	0.3128		102.5760	102.5760	0.1021		104.7190
Total	**28.7873**	**0.6654**	**57.3510**	**3.0100e-003**		**0.3128**	**0.3128**		**0.3128**	**0.3128**	**0.0000**	**102.5760**	**102.5760**	**0.1021**	**0.0000**	**104.7190**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Vegetation

Attachment B

LADOT Correspondence Re: Traffic Assessment Letter, December 12, 2015

Updated Traffic Study, The Mobility Group, November 24, 2015

FORM GEN. 160A (Rev. 1-82)

CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

700 W. 9th St
DOT Case No. CEN 15-43880

Date: December 12, 2015

To: Karen Hoo, City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **UPDATED TRAFFIC ASSESSMENT FOR THE APEX PHASE II (9TH & FIGUEROA) PROPOSED DEVELOPMENT PROJECT**

DOT has reviewed the updated traffic analysis prepared for the revised Apex Phase II Project, dated November 24, 2015, by The Mobility Group. The proposed residential project is located at the southeast corner of 9th Street and Figueroa Street. The original project scope was the subject of a traffic study prepared in March 2005 and of a DOT report dated May 27, 2005. A supplemental traffic analysis in September 23, 2014 was the subject of another DOT assessment letter dated October 3, 2014. The original project proposed to construct 629 condominiums and 27,000 square-feet of retail space. In the supplemental analysis, the project was revised to the construction of 689 condominiums and 22,963 square-feet of retail space.

According to the original traffic impact study from March 2005 and the supplemental analysis from September 23, 2014, the project was expected to result in two significant traffic impacts at the nine intersections identified for detailed analysis. The revised project described in the September 23, 2014 letter was estimated to generate 2,696 net new daily trips, 197 net new trips in the a.m. peak hour and 244 net new trips in the p.m. peak hour. The updated analysis was prepared utilizing current (2015) counts at the study intersections, the latest related project list, and the inclusion of both planned and installed bike lanes that were not part of the last analysis. There have been no changes to the project description. The analysis of the project with the updated conditions did not result in any new significant traffic impacts.

DOT concurs with the updated analysis that the project's expected impacts would not change. On August 11, 2015, the City Council adopted the Mobility Plan 2035 which represents the new Mobility Element of the General Plan. A key feature of the updated plan is to revise street standards in an effort to provide a more enhanced balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. The applicant should check with BOE's Land Development Group to determine the specific highway dedication, street widening and/or sidewalk requirements for this project. Other than any previously made highway dedication and street widening recommendations, all of prior conditions of

DOT's May 27, 2005 and September 23, 2014 letters (attached for reference) shall remain in effect.

If you have any questions, please contact me at (213) 972-8482.

Attachments

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c: Kevin Ocubillo, Council District No. 14
Mehrdad Moshksar, Central District, DOT
Taimour Tanavoli, Citywide Planning Coordination Section, DOT
Gregg Vandergriff, Central District, BOE
Mike Bates, The Mobility Group

FORM GEN. 160A (Rev. 1/82)

CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

700 W. 9th St
DOT Case No. CEN 14-42408

Date: October 3, 2014

To: Karen Hoo, City Planner
Department of City Planning

From: Tomas Carranza, Senior Transportation Engineer
Department of Transportation

Subject: **SUPPLEMENTAL TRAFFIC ANALYSIS FOR APEX PHASE II (9TH & FIGUEROA) PROJECT**

The Department of Transportation (DOT) has reviewed the supplemental traffic analysis, dated September 23, 2014, and prepared by The Mobility Group, for the Apex Phase II project located at the southeast corner of 9th Street and Figueroa Street. The original scope for this project was the subject of a traffic study prepared in March 2005 and of a DOT report dated May 27, 2005. The Vesting Tentative Tract Map (No. 62367) for this project was approved on July 5, 2005 entitling the applicant to construct 629 condominium units and 27,000 square feet of retail space. Since that time, the project has constructed 348 dwelling units and 11,276 square feet of commercial space. The project proposal has been revised and the applicant now proposes to construct a total of 689 residential units and 22,963 square-feet of retail use. This reflects an increase in residential units and a decrease in retail space from the approved project.

The supplemental analysis estimated the trip generation for the revised project proposal and included a revised level-of-service analysis of the original nine intersections selected for detailed evaluation. The analysis (attached for reference) indicates that the change in the project's scope would not result in any new significant traffic impacts and that DOT's original findings are still valid. The revised project scope is estimated to increase the amount of trips generated by the project as follows: 74 more daily trips, 14 more a.m. peak hour trips and 6 more p.m. peak hour trips. For the purpose of this comparison, trip generation from the Institute of Transportation (ITE) Engineers Trip Generation Manual (7th Edition) were used for both project scenarios. The latest edition of this manual was published in 2012 and included updated trip generation rates based on increased data sets and surveys. When comparing the two project scenarios using rates from the 9th Edition, the revised project is actually estimated to result in less trips for the three compared time periods.

The revised project is estimated to generate 2,698 net new daily trips, 197 net new trips in the a.m. peak hour and 244 net new trips in the p.m. peak hour. The revised analysis evaluated the original nine study intersections and determined that, as in the previous study, the same two study intersections would be significantly impacted by project related traffic. Therefore, DOT concurs with the findings of the supplemental traffic analysis that the changes to the project scope would not result in any new significant traffic impacts.

If you have any questions, please contact Wes Pringle of my staff at (213) 972-8482.

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Attachment (Technical Memorandum from The Mobility Group dated September 23, 2014)

c: Tanner Blackman, Council District 14
Taimour Tanavoli, Citywide Planning Coordination Section, DOT
Mike Bates, The Mobility Group

The Mobility Group
Transportation Strategies & Solutions

Memorandum

To: Tomas Carranza, LADOT

From: Matthew Simons, The Mobility Group

Subject: Traffic Review for Apex Phase II (9th & Figueroa) Project

Date: September 23, 2014

The Mobility Group (TMG) initially submitted a Traffic Study for this project, which is located immediately south of 9th Street between Figueroa Street and Flower Street, on March 25, 2005. At that time, the Project Description comprised 629 condominiums and 27,000 sq. ft. of retail space. The analysis contained in that report showed that the proposed project was not expected to generate any significant traffic impacts after mitigation. LADOT agreed with the findings of that report and drafted an Approval Letter (Attachment A) dated May 27, 2005 (DOT Case No. CEN 04-1591). The Vesting Tentative Tract Map (No. 62367) was approved on July 5, 2005, and the Zone Variance and Site Plan Review (ZA 2005-1673(ZV)(ZAA)(SPR) was approved on September 26, 2005.

Since that time, a large part of the Project has been constructed. This has included 348 dwelling units and 11,276 sq. ft. of commercial retail space. The Applicant is now proceeding with construction of the third part of the Project, and wishes to make some minor changes to the Project Description.

Original 2005 Project and Traffic Study Report

The original 2005 report was based on a Project Description of 629 residential condominiums and 27,000 sq. ft. of retail space. The report identified that the Project would generate 2,624 daily trips, 183 AM peak hour trips and 238 PM peak hour trips (Attachment A, Original 2005 Approval Letter, Page 1).

Revised 2014 Project and Analysis

The Applicant has revised the Project Description to include a total of 689 apartment units and 22,963 sq. ft. of retail space. TMG prepared trip generation estimates for the revised Project

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Irvine, CA 92612
Phone: 949-474-1591
Fax: 949-474-1599

Description using trip rates from the 7th Edition (Attachment B, Table B.1) of the Institute of Transportation Engineers (ITE) *Trip Generation* for consistency with the earlier Traffic Study. As for the earlier study, for a conservative analysis and to provide the Project more flexibility, the revised Project trip generation was based on condominium land use (with a slightly higher trip rate than apartment land use).

When the trip generation estimates from the Original 2005 Traffic Study were compared to those calculated for the Revised 2014 Project Description, it was determined that the daily trips are expected to increase from 2,624 trips to 2,698 trips. The AM peak hour trips are expected to increase from 183 trips to 197 trips and PM peak hour trips are expected to increase from 238 trips to 244 trips. Revised level of service analyses were conducted at the study intersections identified in the 2005 Traffic Study using the trip generation estimates calculated for the Revised 2014 Project. The LOS calculations were updated to account for all existing and planned bike lanes that are to be implemented in the study area. The increase in vehicle trips generated by the Revised 2014 Project is not expected to create any new significant impacts at any of the study intersections (Attachment B, Tables B.2 and B.3).

TMG also calculated the trip generation estimates using the trips rates from the 9th Edition (Attachment B, Table B.4) of ITE's *Trip Generation* and compared the results to those calculated using the 7th Edition trip rates. The number of trips in both the AM and PM peak hours is lower when calculated using the 9th Edition trip rates than those calculated using the 7th Edition trip rates. This further supports our conclusion that using the results calculated using the 7th Edition trip rates is the most conservative method of analysis and shows there would not be any new significant impacts.

Conclusion

The proposed change in the Project Description is expected to result in a slight increase in the overall number of vehicle trips the Project is expected to generate. Two significant impacts and acceptable mitigation measures were identified in the Original 2005 Traffic Study. The increase in vehicle trips as a result of the change from the 2005 Project Description to the 2014 Project Description is not expected to create any new significant impacts.

We therefore conclude that the change in Project Description will not create any new significant impacts and that a new traffic study is not necessary.

We respectfully request your concurrence with the above conclusion. If necessary, the Applicant requests a supplemental LADOT letter, describing the changes in the Project Description - and confirming the results of the trip generation analysis and that there would still be no significant impacts at any of the study intersections. They would like to move forward as quickly as possible, so if necessary they are requesting the supplemental letter at your earliest convenience.

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The **Mobility** Group
Transportation Strategies & Solutions

We appreciate your assistance on this project. You may call me at (949)-474-1591 x15 or e-mail me at msimons@mobilitygrp.com, if you have any questions.

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FILE

FORM GEN. 160A (Rev. 1/82)

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

9th St & Figueroa St
DOT Case No. CEN 04-1591

Date: May 27, 2005

To: Hadar Plafkin, City Planner
City Planning Department

From: Mike Bagheri, Transportation Engineer
Department of Transportation

Subject: **TRAFFIC IMPACT STUDY FOR THE PROPOSED MIXED-USE PROJECT LOCATED ON THE SOUTHEAST CORNER OF 9TH STREET AND FIGUEROA STREET (VT#62367)**

The Department of Transportation (DOT) has reviewed the traffic impact study, prepared by traffic consultant The Mobility Group, March 25, 2005, for a proposed mixed-use project located at the southeast corner of 9th Street and Figueroa Street. The study analyzed 9 intersections and determined that two of the study intersections would be significantly impacted by the project related traffic. Except as noted, the study adequately evaluated the project-related traffic impacts on the surrounding community.

DISCUSSION AND FINDINGS

Project Description

The proposed project consists of constructing 629 condominium units and a 27,000 square foot (SF) retail area. The site is currently occupied by a surface parking lot. The project will provide a total of 977 parking spaces in a surface parking structure and subterranean parking structure. The project will take access from one driveway on Figueroa Street and one driveway on Flower Street. The project is expected to be complete by year 2007.

Trip Generation

The project will generate approximately 2,624 net daily trips with 183 net trips in the AM peak hour and 238 net trips in the PM peak hour.

Significant Traffic Impact Locations

The proposed project will experience significant traffic impacts at the following locations:

1. 9th Street and Flower Street
2. Figueroa Street and Olympic Boulevard

PROJECT REQUIREMENTS

A. 9th Street and Flower Street

The proposal to widen the south side of 9th Street and restripe the eastbound approach from four though lanes and one right-turn only lane to four through lanes and two right-turn only lanes is acceptable to DOT. Implementation of this improvement measure may require modification of the traffic signal. The proposed improvement will mitigate the impact at this location to a level of insignificance.

B. Figueroa Street and Olympic Boulevard

The proposal is to obtain additional right-of-way and widen the north side of Olympic Boulevard and restripe the westbound approach from one left-turn only lane, two through lanes and one shared through-right turn lane to one left turn only lane, three through lanes, and one right-turn only lane. The north side of Olympic Boulevard between Flower Street and Figueroa Street has a variable half-width roadway of 35-feet to 46-feet on a variable half-width right-of-way of 50-feet to 58-feet. The proposed mitigation measure would require a half-width roadway widening of 5-feet to 16-feet and a half-width right-of-way dedication of 5-feet to 18-feet. The proposed mitigation measure is acceptable to DOT. The proposed improvement will mitigate the impact at this location to a level of insignificance.

C. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that all construction related traffic be restricted to off-peak hours.

D. Highway Dedication And Street Widening Requirements

Figueroa Street is classified as a Major Highway Class II which requires a 40-foot half-width roadway on a 52-foot half-width right-of-way.

9th Street is classified as a Secondary Highway which requires a 35-foot half-width roadway on a 45-foot half-width right-of-way. DOT recommends a 10-foot widening and a 10-foot dedication along the project frontage.

Flower Street is also classified as a Secondary Highway.

It appears that additional highway dedication and street widening may be required for the proposed project. The developer must check with the Bureau of Engineering (BOE) Land Development Group to determine the highway dedication, street widening and sidewalk requirements for the project.

E. Improvements and Mitigation Measures Implementation

Unless otherwise specified, the proposed mitigation measures and improvements shall be implemented through the Bureau of Engineering (BOE) B-Permit process. Construction of the improvements to the satisfaction of DOT and BOE must be completed before issuance of any certificate of occupancy. Should any improvement not receive required approval, the City may substitute an alternative measure of an equivalent effectiveness. Prior to setting the bond amount, BOE shall require that the developer's engineer or contractor contact DOT's B-Permit Coordinator, telephone (213) 928-9663, to arrange a pre-design meeting to finalize the proposed design needed for the project.

F. Parking Analysis

As noted previously, the proposed project will provide 977 parking spaces. The developer should also check with the Department of Building and Safety on the number of Code required parking spaces needed for the project.

G. Driveway Access

The review of this study does not constitute approval of the driveway access and circulation scheme. Those require separate review and approval and should be coordinated as soon as possible with DOT's Citywide Planning Coordination Section (201 N. Figueroa Street, 4th Floor, Station 3, @ 213-482-7024) to avoid delays in the building permit approval process. In order to minimize and prevent last minute building design changes, it is highly imperative that the applicant, prior to the commencement of building or parking layout design efforts, contact DOT for driveway width and internal circulation requirements so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans to avoid any unnecessary time delays and potential costs associated with late design changes. All driveways should be Case 2 driveways and 30 feet and 18 feet wide for two-way and one-way operations, respectively.

If you have any questions, please contact Wes Pringle of my staff at (213) 972-8482.

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c: Angie English, Council District No. 9
Martha Stephenson, Central District, DOT
Tim Conger, DOT Design
Taimour Tanavoli, Citywide Planning Coordination Section, DOT
Edmond Yew, Land Development Group, BOE
The Mobility Group

The Mobility Group
Transportation Strategies & Solutions

Memorandum

To: Tomas Carranza, LADOT

From: Michael Bates

Subject: Apex II – Traffic Assessment for 2015 Update

Date: November 24, 2015

The Mobility Group (TMG) initially submitted a Traffic Study for this project, which is located immediately south of 9th Street between Figueroa Street and Flower Street, on March 25, 2005. At that time, the Project Description comprised 629 condominiums and 27,000 sq. ft. of retail space. The analysis contained in that report showed that the proposed project was not expected to generate any significant traffic impacts after mitigation at two locations. LADOT agreed with the findings of that report and drafted an Approval Letter (Attachment A) dated May 27, 2005 (DOT Case No. CEN 04-1591). The Vesting Tentative Tract Map (No. 62367) was approved on July 5, 2005, and the Zone Variance and Site Plan Review (ZA 2005-1673(ZV)(ZAA)(SPR) was approved on September 26, 2005.

Since that time, a large part of the Project has been constructed. This has included 348 dwelling units and 11,276 sq. ft. of commercial retail space. The Applicant is now proceeding with construction of the third part of the Project.

Original 2005 Project and Traffic Study Report

The original 2005 report was based on a Project Description of 629 residential condominiums and 27,000 sq. ft. of retail space. The report identified that the Project would generate 2,624 daily trips, 183 AM peak hour trips and 238 PM peak hour trips (Attachment A, Original 2005 Approval Letter, Page 1).

Revised 2014 Project and Analysis

The Mobility Group submitted a Traffic Review Memorandum on September 23, 2014 addressing minor modifications to the proposed program. The revised Project Description

totals include 689 apartment units (small increase) and 22,963 sq. ft. of retail space (small decrease).

Trip generation estimates were prepared for the Revised 2014 Project Description and were compared to those calculated for the Original 2005 Traffic Study. It was determined that the daily trips were expected to increase from 2,624 trips to 2,696 trips. The AM peak hour trips were expected to increase from 183 trips to 197 trips and PM peak hour trips are expected to increase from 238 trips to 244 trips. Revised level of service analyses were conducted at the study intersections identified in the 2005 Traffic Study using the trip generation estimates calculated for the Revised 2014 Project. The LOS calculations were also updated to account for all existing and planned bike lanes that are to be implemented in the study area. It was calculated that the increase in vehicle trips generated by the Revised 2014 Project would not create any new significant impacts at any of the study locations.

In that memorandum we concluded that the proposed change in the Project Description is expected to result in a slight increase in the overall number of vehicle trips the Project is expected to generate. However, the increase in vehicle trips as a result of the change from the 2005 Project Description to the 2014 Project Description was not expected to create any new significant impacts. We therefore concluded that the change in Project Description would not create any new significant impacts and that a new traffic study was not necessary. The original 2005 Traffic Study identified two mitigation measures at the original two impact locations, and these measures would continue to be applicable. That memorandum was approved by LADOT (Attachment B, 2014 Approval Letter).

Updated Traffic Analysis

The aforegoing not withstanding, The Mobility Group has now conducted an evaluation of the 2014 Project with a completely updated traffic analysis including updated 2015 traffic counts, an updated related project list and updated intersection configurations to reflect recently installed and planned bike lanes. The Project description has not changed from the 2014 configuration. This analysis was conducted in accordance with LADOT's current Traffic Impact Analysis Guidelines.

Updated Traffic Counts

The traffic analysis included 2015 traffic counts (conducted in March and May of 2015) at all study intersections.

Updated Related Projects List

A total of 70 related projects were assumed in the traffic study for the 2005 Mitigated Negative Declaration. This analysis prepared a new related projects list, which includes 69 projects. This list and the number of total AM and PM peak hour trips for each project is shown in Appendix C. The updated list has slightly more trips than the traffic study for the 2005 Mitigated Negative Declaration list in both the AM and PM peak hours (+3% and +1%, respectively), as summarized in Table 1.

Updated Lane Configurations

This analysis took into account updated intersection lane configurations to account for existing and planned bike lanes and roadway improvements in the study area, including the MyFigueroa Project.

Updated Level of Service Analysis

Trips for the already completed phase of the project are included in the new 2015 traffic counts. The analysis of potential new impacts was therefore conducted on the incremental addition of trips from the yet to be completed part of the project (Phase 2). These trip generation estimates, which are based on ITE Trip Generation 9th Edition, are shown in Table 2.

The intersection analysis was then updated for the existing traffic counts, the 2015 intersection lane configurations and the 2015 related project list. The updated intersection Level of Service analysis is shown in Table 3 and Table 4. Level of Service calculations are shown in Appendix D

These tables demonstrate that there would be no new significant traffic impacts from the 2014 Revised Project (Phase 2), as evaluated with updated 2015 conditions. However, the original two mitigation measures would continue to apply for the overall buildout of the project.

Conclusions

This memorandum has demonstrated that:

- This 2015 Analysis Update included updated existing traffic counts, updated intersection lane configurations and an updated related project list.

Table 1 **Related Project List Comparison** 11/24/2015

Project Document	# of Related Project	Related Project A.M Peak Hour			Related Project P.M Peak Hour		
		In	Out	Total	In	Out	Total
2005 Project	70	9,877	7,288	17,163	11,725	13,041	24,766
2015 Update	69	8,709	9,007	17,716	12,338	12,631	24,969

Table 2. **Apex II Project - Phase 2 Program** 11/24/2015

Daily

Land Use Assumptions	Source [1] & Code	Quantity	Units	Daily	
				Trip Rate	Total Trips
Proposed					
Condominiums	ITE 232	341	DU	4.18	1,425
(Reduction for transit / walk trips) - 20%					-285
Net Condominiums					1,140
Retail	ITE 820	11,687	S.F	42.70	500
(Reduction for internal / walk trips) - 10%					-50
(Reduction for pass-by trips) - 50%					-225
Net Retail					225
Total Proposed					1,365
Total					1,365

A.M Peak

Land Use Assumptions	Source [1] & Code	Quantity	Units	A.M Peak Hour					
				Trip Rate			Total Trips		
				In	Out	Total	In	Out	Total
Proposed									
Condominiums	ITE 232	341	DU	0.06	0.28	0.34	22	94	116
(Reduction for transit / walk trips) - 20%							-4	-19	-23
Net Condominiums							18	75	93
Retail	ITE 820	11,687	S.F	0.60	0.37	0.98	7	4	11
(Reduction for internal) - 10%							-1	0	-1
(Reduction for transit / walk trips) - 20%							-1	-1	-2
(Reduction for pass-by trips) - 50%							-3	-1	-4
Net Retail							2	2	4
Total Proposed							20	77	97
Total							20	77	97

Table 2. **Apex II Project - Phase 2 Program** 11/24/2015

P.M Peak

Land Use Assumptions	Source [1] & Code	Quantity	Units	P.M Peak Hour					
				Trip Rate			Total Trips		
				In	Out	Total	In	Out	Total
Proposed									
Condominiums	ITE 232	341	DU	0.24	0.14	0.38	81	49	130
(Reduction for transit / walk trips) - 20%							-16	-10	-26
Net Condominiums							65	39	104
Retail	ITE 820	11,687	S F	1.78	1.93	3.71	21	23	44
(Reduction for internal) - 10%							-2	-2	-4
(Reduction for transit / walk trips) - 20%							-4	-4	-8
(Reduction for pass-by trips) - 50%							-8	-8	-16
Net Retail							7	9	16
Total Proposed							72	48	120
Total							72	48	120

1. ITE Rates from Trip Generation, 9th Edition, Institute of Transportation Engineers, Washington, DC, 2012.

Table 3 **Future With Project Conditions - Intersection Level of Service**
AM Peak Hour

Intersection	AM Peak Hour				Change in V / C	Significant Impact
	Future Without Project		Future With Project			
	V / C	LOS	V / C	LOS		
1. Figueroa St & 8th St	1.138	F	1.143	F	0.005	No
2. Figueroa St & 9th St	1.029	F	1.038	F	0.009	No
3. Figueroa St & Olympic Blvd	1.588	F	1.592	F	0.004	No
4. Flower St & 8th St	0.416	A	0.417	A	0.001	No
5. Flower St & 9th St	0.389	A	0.394	A	0.005	No
6. Flower St & Olympic Blvd	0.566	A	0.569	A	0.003	No
7. Bixel St & 8th St	0.933	E	0.935	E	0.002	No
8. Francisco St & 9th St	0.352	A	0.353	A	0.001	No
9. Francisco St & 8th St	0.359	A	0.361	A	0.002	No

Table 4 **Future With Project Conditions - Intersection Level of Service**
PM Peak Hour

Intersection	PM Peak Hour				Change in V / C	Significant Impact
	Future Without Project		Future With Project			
	V / C	LOS	V / C	LOS		
1. Figueroa St & 8th St	1.152	F	1.155	F	0.003	No
2. Figueroa St & 9th St	0.901	E	0.910	E	0.009	No
3. Figueroa St & Olympic Blvd	1.438	F	1.447	F	0.009	No
4. Flower St & 8th St	0.657	B	0.661	B	0.004	No
5. Flower St & 9th St	0.735	C	0.745	C	0.010	No
6. Flower St & Olympic Blvd	0.827	D	0.837	D	0.010	No
7. Bixel St & 8th St	1.131	F	1.136	F	0.005	No
8. Francisco St & 9th St	0.411	A	0.414	A	0.003	No
9. Francisco St & 8th St	0.498	A	0.500	A	0.002	No

- The 2015 Analysis Update demonstrated that the intersection V/C increases due to the Phase 2 Project would still be below the threshold for significance, and there would be no new significant intersection impacts.

We respectfully request LADOT's concurrence with these conclusions.

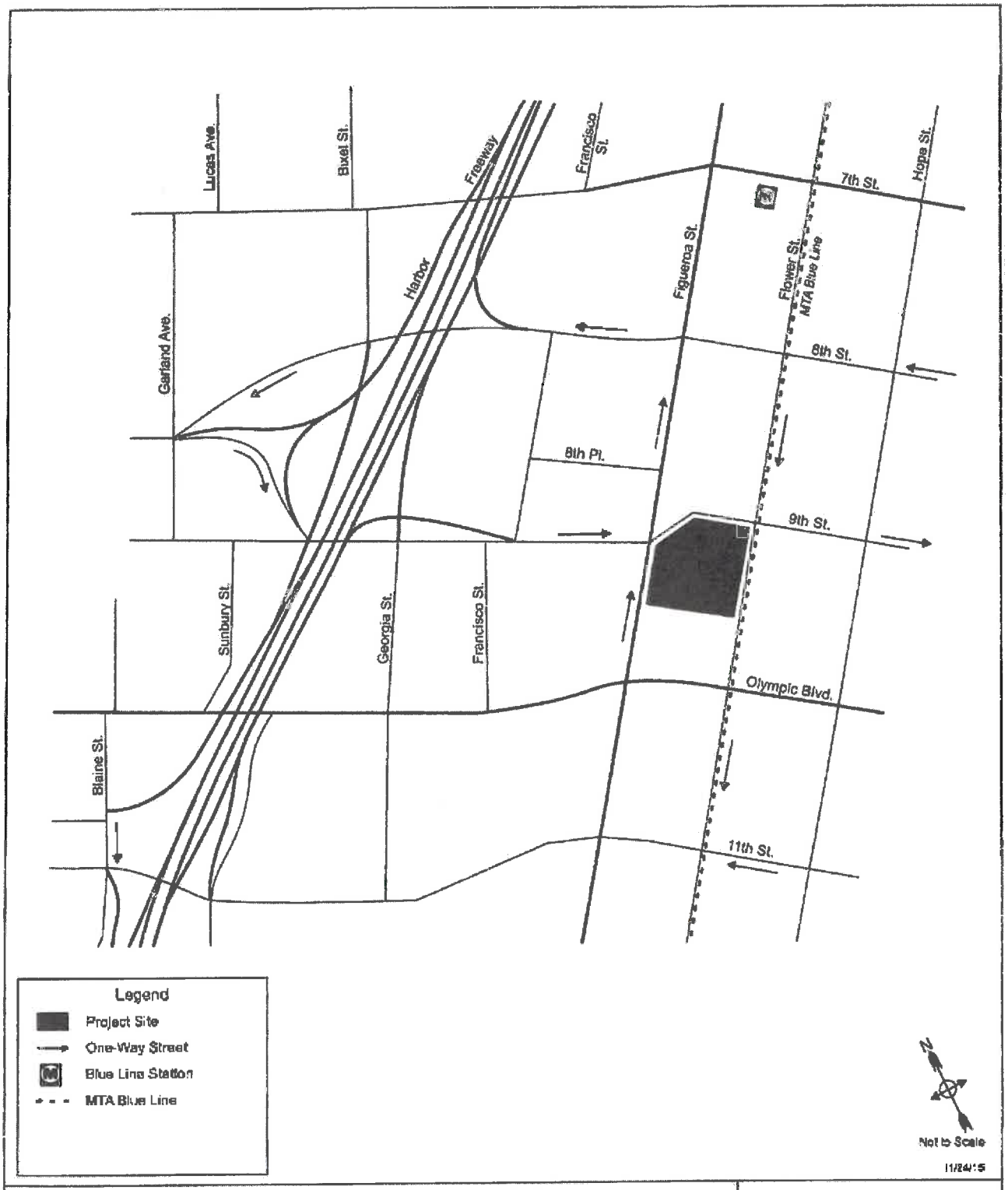

Figure 1
Project Location

Apex II Project

The Mobility Group
Transportation Strategies & Solutions

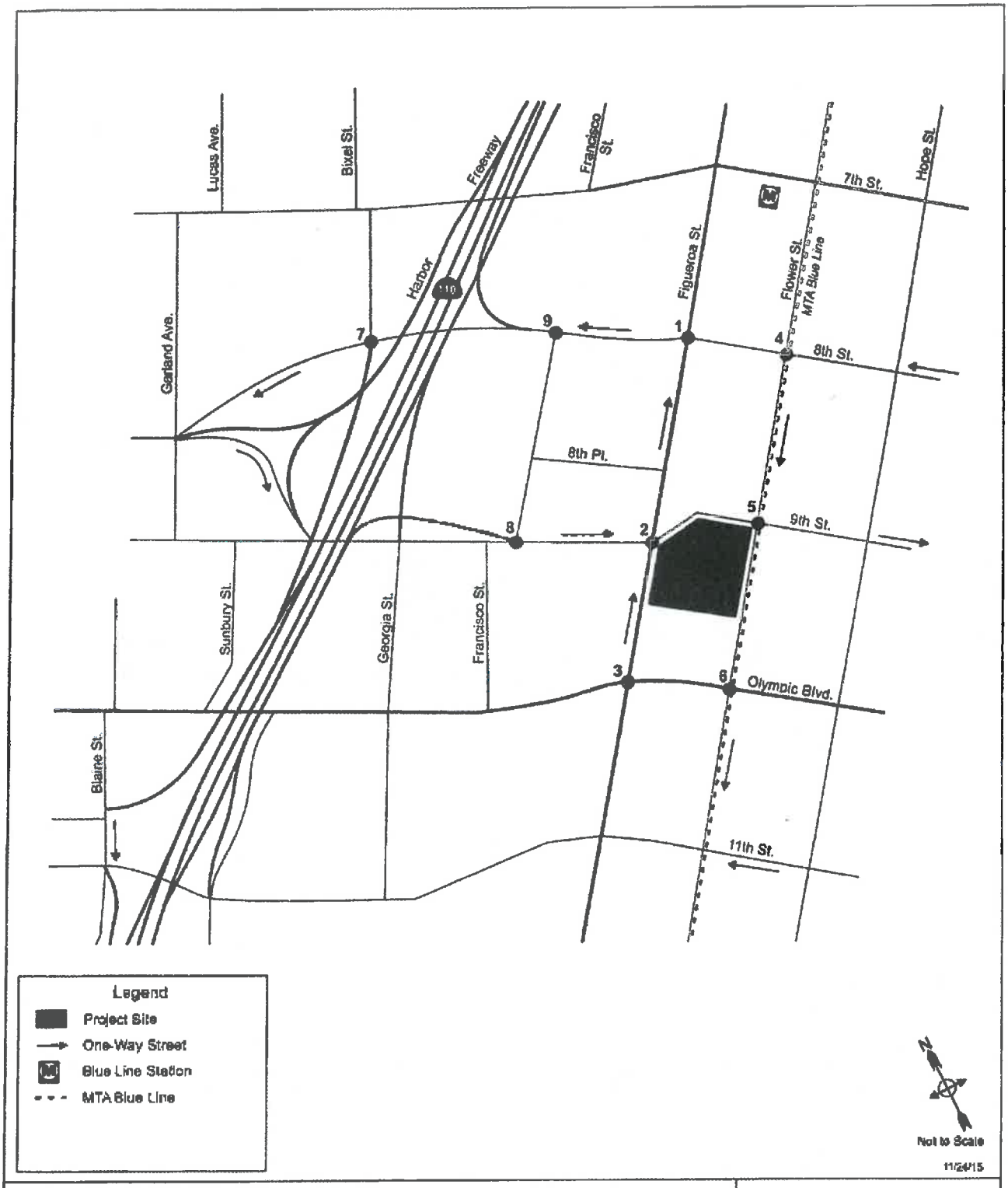

Figure 2
Location of Analyzed Intersections

Apex II Project

The **Mobility** Group
Transportation Strategies & Solutions

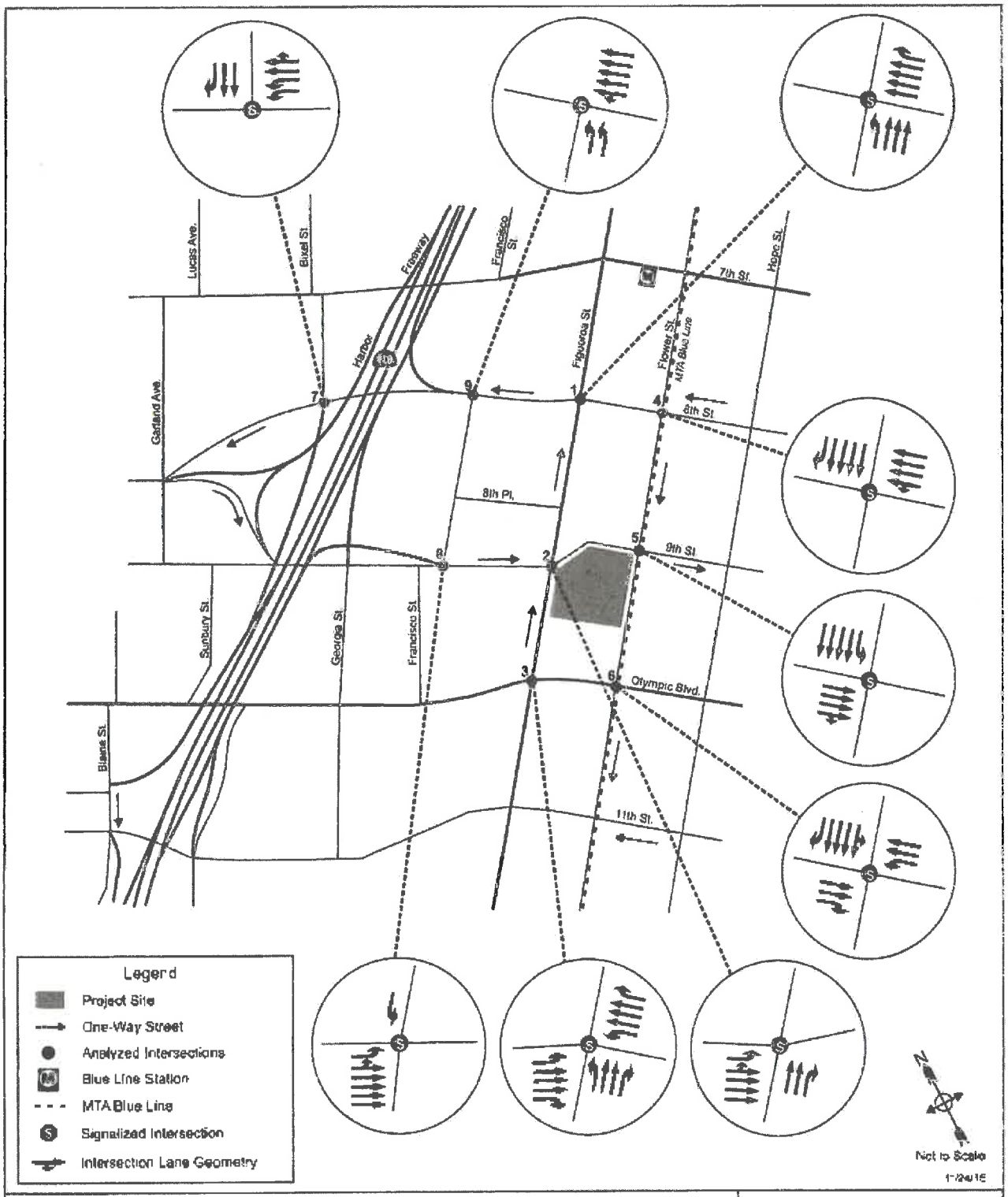

Figure 3
Configuration of Analyzed Intersections

Apex II Project

The Mobility Group
Transportation Strategies & Solutions

Appendix A

2005 LADOT Approval Letter

FORM GEN. 160A (Rev. 1/82)

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

9th St & Figueroa St
DOT Case No. CEN 04-1591

Date: May 27, 2005

To: Hadar Plafkin, City Planner
City Planning Department

From: Mike Bagheri, Transportation Engineer
Department of Transportation

Subject: **TRAFFIC IMPACT STUDY FOR THE PROPOSED MIXED-USE PROJECT LOCATED ON THE SOUTHEAST CORNER OF 9TH STREET AND FIGUEROA STREET (VT#62367)**

The Department of Transportation (DOT) has reviewed the traffic impact study, prepared by traffic consultant The Mobility Group, March 25, 2005, for a proposed mixed-use project located at the southeast corner of 9th Street and Figueroa Street. The study analyzed 9 intersections and determined that two of the study intersections would be significantly impacted by the project related traffic. Except as noted, the study adequately evaluated the project-related traffic impacts on the surrounding community.

DISCUSSION AND FINDINGS

Project Description

The proposed project consists of constructing 629 condominium units and a 27,000 square foot (SF) retail area. The site is currently occupied by a surface parking lot. The project will provide a total of 977 parking spaces in a surface parking structure and subterranean parking structure. The project will take access from one driveway on Figueroa Street and one driveway on Flower Street. The project is expected to be complete by year 2007.

Trip Generation

The project will generate approximately 2,624 net daily trips with 183 net trips in the AM peak hour and 238 net trips in the PM peak hour.

Significant Traffic Impact Locations

The proposed project will experience significant traffic impacts at the following locations:

1. 9th Street and Flower Street
2. Figueroa Street and Olympic Boulevard

PROJECT REQUIREMENTS

A. 9th Street and Flower Street

The proposal to widen the south side of 9th Street and restripe the eastbound approach from four though lanes and one right-turn only lane to four through lanes and two right-turn only lanes is acceptable to DOT. Implementation of this improvement measure may require modification of the traffic signal. The proposed improvement will mitigate the impact at this location to a level of insignificance.

B. Figueroa Street and Olympic Boulevard

The proposal is to obtain additional right-of-way and widen the north side of Olympic Boulevard and restripe the westbound approach from one left-turn only lane, two through lanes and one shared through-right turn lane to one left turn only lane, three through lanes, and one right-turn only lane. The north side of Olympic Boulevard between Flower Street and Figueroa Street has a variable half-width roadway of 35-feet to 46-feet on a variable half-width right-of-way of 50-feet to 58-feet. The proposed mitigation measure would require a half-width roadway widening of 5-feet to 16-feet and a half-width right-of-way dedication of 5-feet to 18-feet. The proposed mitigation measure is acceptable to DOT. The proposed improvement will mitigate the impact at this location to a level of insignificance.

C. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that all construction related traffic be restricted to off-peak hours.

D. Highway Dedication And Street Widening Requirements

Figueroa Street is classified as a Major Highway Class II which requires a 40-foot half-width roadway on a 52-foot half-width right-of-way.

9th Street is classified as a Secondary Highway which requires a 35-foot half-width roadway on a 45-foot half-width right-of-way. DOT recommends a 10-foot widening and a 10-foot dedication along the project frontage.

Flower Street is also classified as a Secondary Highway.

It appears that additional highway dedication and street widening may be required for the proposed project. The developer must check with the Bureau of Engineering (BOE) Land Development Group to determine the highway dedication, street widening and sidewalk requirements for the project.

E. Improvements and Mitigation Measures Implementation

Unless otherwise specified, the proposed mitigation measures and improvements shall be implemented through the Bureau of Engineering (BOE) B-Permit process. Construction of the improvements to the satisfaction of DOT and BOE must be completed before issuance of any certificate of occupancy. Should any improvement not receive required approval, the City may substitute an alternative measure of an equivalent effectiveness. Prior to setting the bond amount, BOE shall require that the developer's engineer or contractor contact DOT's B-Permit Coordinator, telephone (213) 928-9663, to arrange a pre-design meeting to finalize the proposed design needed for the project.

F. Parking Analysis

As noted previously, the proposed project will provide 977 parking spaces. The developer should also check with the Department of Building and Safety on the number of Code required parking spaces needed for the project.

G. Driveway Access

The review of this study does not constitute approval of the driveway access and circulation scheme. Those require separate review and approval and should be coordinated as soon as possible with DOT's Citywide Planning Coordination Section (201 N. Figueroa Street, 4th Floor, Station 3, @ 213-482-7024) to avoid delays in the building permit approval process. In order to minimize and prevent last minute building design changes, it is highly imperative that the applicant, prior to the commencement of building or parking layout design efforts, contact DOT for driveway width and internal circulation requirements so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans to avoid any unnecessary time delays and potential costs associated with late design changes. All driveways should be Case 2 driveways and 30 feet and 18 feet wide for two-way and one-way operations, respectively.

If you have any questions, please contact Wes Pringle of my staff at (213) 972-8482.

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c: Angie English, Council District No. 9
Martha Stephenson, Central District, DOT
Tim Conger, DOT Design
Taimour Tanavoli, Citywide Planning Coordination Section, DOT
Edmond Yew, Land Development Group, BOE
The Mobility Group

Appendix B

2014 LADOT Approval Letter

FORM GEN. 160A (Rev. 1/82)

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

700 W. 9th St
DOT Case No. CEN 14-42408

Date: October 3, 2014

To: Karen Hoo, City Planner
Department of City Planning

From: Tomas Carranza, Senior Transportation Engineer
Department of Transportation

Subject: **SUPPLEMENTAL TRAFFIC ANALYSIS FOR APEX PHASE II (9TH & FIGUEROA) PROJECT**

The Department of Transportation (DOT) has reviewed the supplemental traffic analysis, dated September 23, 2014, and prepared by The Mobility Group, for the Apex Phase II project located at the southeast corner of 9th Street and Figueroa Street. The original scope for this project was the subject of a traffic study prepared in March 2005 and of a DOT report dated May 27, 2005. The Vesting Tentative Tract Map (No. 62367) for this project was approved on July 5, 2005 entitling the applicant to construct 629 condominium units and 27,000 square feet of retail space. Since that time, the project has constructed 348 dwelling units and 11,276 square feet of commercial space. The project proposal has been revised and the applicant now proposes to construct a total of 689 residential units and 22,963 square-feet of retail use. This reflects an increase in residential units and a decrease in retail space from the approved project.

The supplemental analysis estimated the trip generation for the revised project proposal and included a revised level-of-service analysis of the original nine intersections selected for detailed evaluation. The analysis (attached for reference) indicates that the change in the project's scope would not result in any new significant traffic impacts and that DOT's original findings are still valid. The revised project scope is estimated to increase the amount of trips generated by the project as follows: 74 more daily trips, 14 more a.m. peak hour trips and 6 more p.m. peak hour trips. For the purpose of this comparison, trip generation from the Institute of Transportation (ITE) Engineers Trip Generation Manual (7th Edition) were used for both project scenarios. The latest edition of this manual was published in 2012 and included updated trip generation rates based on increased data sets and surveys. When comparing the two project scenarios using rates from the 9th Edition, the revised project is actually estimated to result in less trips for the three compared time periods.

The revised project is estimated to generate 2,698 net new daily trips, 197 net new trips in the a.m. peak hour and 244 net new trips in the p.m. peak hour. The revised analysis evaluated the original nine study intersections and determined that, as in the previous study, the same two study intersections would be significantly impacted by project related traffic. Therefore, DOT concurs with the findings of the supplemental traffic analysis that the changes to the project scope would not result in any new significant traffic impacts.

If you have any questions, please contact Wes Pringle of my staff at (213) 972-8482.

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Attachment (Technical Memorandum from The Mobility Group dated September 23, 2014)

c: Tanner Blackman, Council District 14
Taimour Tanavoli, Citywide Planning Coordination Section, DOT
Mike Bates, The Mobility Group

The **Mobility** Group
Transportation Strategies & Solutions

Memorandum

To: Tomas Carranza, LADOT

From: Matthew Simons, The Mobility Group

Subject: Traffic Review for Apex Phase II (9th & Figueroa) Project

Date: September 23, 2014

The Mobility Group (TMG) initially submitted a Traffic Study for this project, which is located immediately south of 9th Street between Figueroa Street and Flower Street, on March 25, 2005. At that time, the Project Description comprised 629 condominiums and 27,000 sq. ft. of retail space. The analysis contained in that report showed that the proposed project was not expected to generate any significant traffic impacts after mitigation. LADOT agreed with the findings of that report and drafted an Approval Letter (Attachment A) dated May 27, 2005 (DOT Case No. CEN 04-1591). The Vesting Tentative Tract Map (No. 62367) was approved on July 5, 2005, and the Zone Variance and Site Plan Review (ZA 2005-1673(ZV)(ZAA)(SPR) was approved on September 26, 2005.

Since that time, a large part of the Project has been constructed. This has included 348 dwelling units and 11,276 sq. ft. of commercial retail space. The Applicant is now proceeding with construction of the third part of the Project, and wishes to make some minor changes to the Project Description.

Original 2005 Project and Traffic Study Report

The original 2005 report was based on a Project Description of 629 residential condominiums and 27,000 sq. ft. of retail space. The report identified that the Project would generate 2,624 daily trips, 183 AM peak hour trips and 238 PM peak hour trips (Attachment A, Original 2005 Approval Letter, Page 1).

Revised 2014 Project and Analysis

The Applicant has revised the Project Description to include a total of 689 apartment units and 22,963 sq. ft. of retail space. TMG prepared trip generation estimates for the revised Project

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Irvine, CA 92612
Phone: 949-474-1591
Fax: 949-474-1599

Description using trip rates from the 7th Edition (Attachment B, Table B.1) of the Institute of Transportation Engineers (ITE) *Trip Generation* for consistency with the earlier Traffic Study. As for the earlier study, for a conservative analysis and to provide the Project more flexibility, the revised Project trip generation was based on condominium land use (with a slightly higher trip rate than apartment land use).

When the trip generation estimates from the Original 2005 Traffic Study were compared to those calculated for the Revised 2014 Project Description, it was determined that the daily trips are expected to increase from 2,624 trips to 2,698 trips. The AM peak hour trips are expected to increase from 183 trips to 197 trips and PM peak hour trips are expected to increase from 238 trips to 244 trips. Revised level of service analyses were conducted at the study intersections identified in the 2005 Traffic Study using the trip generation estimates calculated for the Revised 2014 Project. The LOS calculations were updated to account for all existing and planned bike lanes that are to be implemented in the study area. The increase in vehicle trips generated by the Revised 2014 Project is not expected to create any new significant impacts at any of the study intersections (Attachment B, Tables B.2 and B.3).

TMG also calculated the trip generation estimates using the trips rates from the 9th Edition (Attachment B, Table B.4) of ITE's *Trip Generation* and compared the results to those calculated using the 7th Edition trip rates. The number of trips in both the AM and PM peak hours is lower when calculated using the 9th Edition trip rates than those calculated using the 7th Edition trip rates. This further supports our conclusion that using the results calculated using the 7th Edition trip rates is the most conservative method of analysis and shows there would not be any new significant impacts.

Conclusion

The proposed change in the Project Description is expected to result in a slight increase in the overall number of vehicle trips the Project is expected to generate. Two significant impacts and acceptable mitigation measures were identified in the Original 2005 Traffic Study. The increase in vehicle trips as a result of the change from the 2005 Project Description to the 2014 Project Description is not expected to create any new significant impacts.

We therefore conclude that the change in Project Description will not create any new significant impacts and that a new traffic study is not necessary.

We respectfully request your concurrence with the above conclusion. If necessary, the Applicant requests a supplemental LADOT letter, describing the changes in the Project Description - and confirming the results of the trip generation analysis and that there would still be no significant impacts at any of the study intersections. They would like to move forward as quickly as possible, so if necessary they are requesting the supplemental letter at your earliest convenience.

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Fax: 949.474.1599

The Mobility Group

Transportation Strategies & Solutions

We appreciate your assistance on this project. You may call me at (949)-474-1591 x15 or e-mail me at msimons@mobilitygrp.com, if you have any questions.

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Irvine, CA 92612
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Appendix C

Updated Related Projects Table

Table C.1 Related Project List and Trip Generation Estimates

Project #	Project Name - EAF # / DOT Case #	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
-	Apartments	1267 S Gaffey Ave	118 DU	Apartments	769	16	41	57	42	25	67
7	1400 S Figueroa Residential Project	1401 S Figueroa	106 DU	Apartments	647	10	38	48	39	32	71
3	Mixed-Use	520 S Olive St	589 DU 4,500 sf	Apartments Retail	3,309	69	202	265	195	106	301
4	Variety Arts Project	940 S Figueroa St	3,295 sf	Office	1,964	152	1	153	56	138	194
5	8th & Grand Mixed-Use Project	718 S Grand	700 DU 27,000 sf 5,000 sf	Condominiums Retail Restaurants	3,131	88	189	277	275	202	477
6	DTLA South Park - Site 1	1320 S Grand Ave	461 DU 330 Rooms 8,700 sf	High-rise Apt Hotel Retail	3,818	110	143	253	167	136	303
7	DTLA South Park - Site 2	1230 S Olive St	362 DU	Apartments	2,114	31	126	157	127	69	196
8	Mixed-Use (Herald Examiner)	146 W 11th (11th St / Broadway)	391 DU 39,728 sf 40,000 sf	Apartments Office Retail	6,196	144	176	320	258	274	532
9	Mixed Use	127 N Fremont Ave (Fremont / Temple)	600 DU 25,000 sf	Apartments Retail	3,457	113	248	361	266	217	503
10	Restaurant Project	1035 S Grand Ave	7,149 sf	Restaurant	492	9	3	5	27	14	41
11	ASP		22 DU 7,445,210 sf 645,000 sf 750 Room 20,000 sf 70,000 sf	Residential Office Retail Hotel Restaurant Museum	75,212	1,438	878	2,316	1,063	1,400	2,463
12	LA Plaza Cultura Village	527 N Spring St 555 N Broadway	384 DU 50,000 sf	Apartments Retail	4,699	69	175	244	244	180	424
13	Mixed-use Development; 2008 ENV-3558	745 S. Spring (Spring/6th St.)	247 DU 10,675 sf	Condominiums Retail	1,543	23	67	90	80	69	149

Table C.1 Related Project List and Trip Generation Estimates

Project #	Project Name - EAF # / DOT Case #	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
14	Onyx Apartment	Pico Blvd. b/w Flower and Grand	418 DU	Apartments	4,260	88	105	193	136	102	238
			79,730 sf	Retail							
			6,400 sf	Quality Restaurant							
			6,400 sf	Fast-food Restaurant							
15	O12 Project	North of Pico b/w Grand and Olive	640 DU	Apartments	4,850	92	148	240	181	134	315
			30,000 sf	Retail							
			10,000 sf	Restaurant							
16	Mixed Use ENV2008-4679EA, 2008-CEN-4902	1050 S. Grand Ave (Grand Ave. - 11th St.)	128 DU	Condominiums	676	15	54	69	64	35	99
			3,072 sf	Retail							
			2,200 sf	Restaurant							
17	8th/Grand/Hope Project	609 W 8th	225 DU	Condominiums	4,908	85	109	194	243	158	401
			200 Rooms	Hotel							
			30,000 sf	Retail							
			32,000 sf	Restaurant							
18	11th & Hill Project 2017-CEN-3989	1115 S Hill St	172 DU	Condominiums	543	-45	40	5	50	-7	43
			6,850 sf	Retail							
19	Mixed Use	SOLA Village	500 DU	Condominiums	12,737	390	552	942	637	566	1203
			550 DU	Apartments (Rental)							
			210 Rooms	Hotel							
			143,100 SF	Retail/Commercial							
			180,000 SF	Office							
			17,600 SF	Gallery/Museum							
			8,000 SF	Gym							
20	New Medical Office building (Good Samaritan Hospital) ENV2009-0884EA	Wilshire Blvd/Witmer St	66,450 sf	Imaging center, pharmacy, surgical suites and physician offices	3,396	190	70	260	106	248	354
21	Charter High School	1552 W Rockwood St	600 Students	Charter High School	715	122	50	180	26	25	51
22	Park/Fifth Project	427 W 5th	900 DU	Condominiums	3,139	42	115	157	164	97	261
			19,000 sf	Retail							
			19,200 sf	Restaurant							
23	Kawada Tower 2006-CEN-1603	250 S Hill (Hill & 3rd)	330 DU	Condominiums	1,561	21	73	94	66	42	108
			12,000 sf	Retail							

Table C.1 Related Project List and Trip Generation Estimates

Project #	Project Name / EAF # / DOT Case #	Location / Address	Project Description		Daily Trips	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
24	Mixed Use	1435 W 3rd Street	177 DU	Apartment	711	11	42	53	41	25	66
	2012-CEN-4016		3,500 sf	Retail							
25	Grand Avenue Project	Parcel Q and Parcel W - Bounded by 1st Street, Grand Avenue, Hill Street, & Upper 2nd Street	1,648 DU	Condominiums	22,601	919	632	1,551	1,120	1,344	2,464
	2006-CEN-3022		412 DU	Apartments							
		Parcel L/M 2 - Bounded by GTK Way, Hope Street & Upper 2nd Street	681,000 sf	County Office Building							
			53,000 sf	Super Market							
			67,000 sf	Restaurant							
			229,250 sf	Retail							
			250 Seats	Event Facility							
			50,000 sf	Health Club							
			275 Rooms	Hotel							
26	Washington Bl Opportunity MU (Metro Hsg)	E Washington Bl/Los Angeles St	230 DU	Residential Units	2,112	38	118	156	125	53	178
	2009-CEN-3050		32 DU	Replacement Residential Units							
			19,000 sf	Specialty Retail/Restaurant							
27	Mixed Use	2100 S Figueroa	231 DU	Condominium	370	82	66	-16	67	-28	39
	2010-CEN-5294		7,134 sf	Retail							
28	9th / Olive Project	840/888 S Olive St	303 DU	Apartments	3,007	80	165	245	171	93	264
			9,680 sf	Retail							
			1,500 sf	Restaurant							
29	Office	1130 W Wilshire Bl	60,844 sf	Office	530	91	12	103	14	69	83
	2006-CEN-4699										
30	Beverly + Lucas Project	1430 W Beverly Bl	157 DU	Apartments	667	13	53	66	52	28	80
	2006-CEN-4799										
31	Broadway Mixed	955 S Broadway	201 DU	Apartments	1,276	21	72	93	74	43	117
			6,000 sf	Retail							
32	801 S Olive Street Project	801 S Olive St	363 DU	Apartments	2,351	33	129	162	149	83	232
			2,500 sf	Retail							
			7,500 sf	Restaurant							
33	Mixed Use Building	233 W Washington Bl	160 DU	Apartments	638	25	56	81	89	71	160
	ENV2008-3386CA, 2008-CEN-4672		24,250 sf	Retail							

Table C.1 Related Project List and Trip Generation Estimates

Project #	Project Name - EAF # / DOT Case #	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
34	Good Samaritan Mixed-Use Project ENV2007-5807EIR 2007-CEN-4520	1136 W 6th St	648 DU 33,956 sf	Apartments Retail	4,700	61	195	256	232	155	387
35	Condominiums ENV2008-0432EA 2008-CEN-4671	1340 S Olive St	150 DU	Condominiums	975	11	55	66	50	26	76
36	SB OMEGA	601 S Main St	350 DU 12,000 sf	High-rise Condo Retail	2,538	39	132	171	145	90	235
37	Hill Mixed	920 S Hill	213 DU 5,400 sf	Apartments Retail	1,626	22	76	98	79	44	123
38	Warner Project	1029 W 7th St (HF Warner)	94 DU 2,000 sf	Condominiums Retail	1,486	16	37	53	39	22	61
39	1133 Hope Street Project	1133 Hope Street	208 DU 5,028 sf	Condominiums Restaurant	1,543	20	74	94	91	50	141
40	700 Cesar Chavez Ave Project	700 Cesar Chavez	247 DU 8,000 sf	Apartment Retail	1,159	2	67	69	78	42	120
41	1340 S Figueroa 2008-CEN-4774	1340 S Figueroa St	252 DU 11,000 sf	Apartments Restaurant	1,781	29	89	118	101	65	166
42	Oak Village Residences 2008-CEN-4889	902 W Washington Bl	142 DU	Condominiums	682	2	25	27	35	16	51
43	Broadway Lofts	1148 S Broadway	94 DU 7,500 sf	Apartments Retail	553	8	30	38	32	18	50
44	Mixed Use	928 S Broadway	662 DU 47,000 sf 11,000 sf 34,624 sf	Apartments Retail Live/Work Office	4,715	21	229	250	272	109	381
45	Los Angeles Street Civic Center Project	150 N Los Angeles Street	712,500 sf 35,000 sf 2,500 sf	Government Office Retail Child Care Facility	13,554	930	118	1,048	432	942	1,374
46	Metropolis Mixed-Use	851 S Francisco St (9th St / Francisco St)	480 Rooms 836 DU 989,775 sf 46,000 sf	Hotel Condominiums Office Retail	8,516	307	318	625	386	512	898

Table C.1 Related Project List and Trip Generation Estimates

Project #	Project Name - EAF # - DOT Case #	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
47	Mixed Use Development 2006 CEN 2870	1027 W. Wilshire Project (Wilshire / St. Paul St.)	407 DU 7,422 sf	Condominiums Retail	1,458	21	92	113	83	53	136
48	Residential Project	1027 S Olive Street	100 DU	Apartments	665	10	41	51	40	22	62
49	Embassy Tower 2008 CEN-4779	848 S Grand Av	470 DU 38,500 sf	Hi-Rise Condominiums Market	3,882	36	174	210	253	124	377
50	LASED Entertainment District (Excluding development to date)	Figueroa St / 11th St	1,254 DU 95,738 sf 146,581 sf 60,000 sf 12,339 sf 6,000 sf 193 Rooms 367,300 sf 298,500 sf 250,000 sf	Residential Educational Retail Restaurants Health Club Sport Bar Hotel Office Production Studio Convention Center Expansion	22,171	463	267	680	881	1,025	1,906
51	City Market Project	San Pedro Street b/w 9th St and 12th St	1,400 Students 176,711 sf 744 Seats 945 DU 210 Rooms 294,641 GSF	University Shopping Center Cinema Apartments Hotel Office	16,402	837	434	1,271	672	857	1,529
52	Wilshire Grand Redevelopment Project ENV2009-1577EIR, 2009-CEN-5080	930 W Wilshire Bl	560 Rooms 100 DU 1,500,000 sf 275,000 sf	Hotel Rooms Residential Units Office Retail/Restaurant	3,874	725	75	800	94	764	858
53	1212 Flower		730 DU 10,500 sf 70,465 sf	Apartments Retail/Restaurant Office	3,956	79	233	312	229	121	350
54	Olympic / Hill Project	Northwest corner of Olympic / Hill	300 DU 14,500 sf 6,500 sf	Apartments Retail Restaurant	2,496	30	104	134	143	82	225

Table C.1 Related Project List and Trip Generation Estimates

Project #	Project Name - EAF # / DOT Case #	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
55	1500 S Figueroa	1500 S Figueroa St	190 DU	Apartment	1,189	18	67	85	71	40	111
			12,432 sf	Retail/Restaurant							
56	1780 W Olympic Hotel	1700 W Olympic	160 Rooms	Hotel	1,157	54	32	86	45	42	87
57	Mixed-Use	534 S Main St	166 DU	Apartments	2,213	53	75	127	87	58	145
			18,630 sf	Retail							
			3,500 sf	Restaurant							
			3,500 sf	Fast-food Restaurant							
58	1000 Grand Project	1000 Grand Ave	274 DU	Apartment	2,216	27	94	121	130	65	195
			12,000 sf	Restaurant							
59	400 S Broadway Mixed-Use Project	400-416 Broadway	435 DU	Apartments	2,628	36	147	183	139	73	212
			10,000 sf	Retail							
			5,000 sf	Lounge							
60	1001 S Olive	1001 S Olive St	225 DU	Apartments	1,561	22	79	101	94	51	145
			5,000 sf	Restaurant							
61	Olive & Olympic	Northeast corner of Olive & Olympic	263 DU	Apartments	2,286	25	91	116	132	71	203
			14,500 sf	Restaurant							
62	L.A. Trade Tech College - 5-Year Master Plan	400 Washington Blvd (Washington Blvd. / Flower St.)	6,300 Stu	5-year Master Plan Project	8,420	336	127	463	574	286	860
63	Palmetto	Northeast corner of Palmetto & Seaton	234 DU	Apartments	2,004	73	141	214	147	83	230
			15,018 sf	Restaurant							
64	Mixed Use	1235 W 1st St	101 DU	Apartments	714	10	40	50	42	24	66
			3,514 sf	Retail							
65	Residential	459 S Hartford Ave	94 DU	Apartments	656	9	37	46	40	23	63
66	Residential Project	401 E Bayshore St	101 DU	Apartments	649	9	40	49	38	21	59
67	Mixed-Use Project	1150 W Washita	60 DU	Apartment	511	-22	28	6	28	-5	34
			4,389 sf	Restaurant							

Table C.1 Related Project List and Trip Generation Estimates

Project #	Project Name - EAF # / DOT Case #	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
68	Mixed Use	237 S Spring	320 DU	Apartments	3,042	72	141	213	161	122	283
			25,000 sf	Pharmacy							
69	Apartments	1218 W Ingraham St	90 DU	Apartments	532	8	33	41	33	17	50
Total					**258,407**	**8,709**	**9,007**	**17,716**	**12,339**	**12,621**	**24,960**

\\TMG-E2013\Network\Projects 2015\Apps ... - Response   TSJ...\Fortem\Memo\Table C.1 Related Project & TG for 9th & Fig 05-19-15 V7 Report.xlsx]9th & Fig

Appendix C

Department of Water and Power

Water Supply Assessment

RESOLUTION NO. 005 185

WHEREAS, in January 2005, the City of Los Angeles Department of City Planning, requested LADWP to conduct a water supply assessment for the 9th & Figueroa Project (Project) pursuant to California Water Code Sections 10910-10915; and

WHEREAS, LADWP has prepared a water supply assessment for the Project in compliance with California Water Code Sections 10910-10915; and

WHEREAS, LADWP's water supply system now serves the immediate Project area, and would serve the area of the proposed Project development; and

WHEREAS, LADWP estimates the annual increase in water demand from the 2.3-acre Project site to be 124 acre-feet based on review of information submitted by the City of Los Angeles Department of City Planning; and

WHEREAS, the projected water demand associated with the Project is within the range of water demand projections anticipated in the City of Los Angeles' Year 2000 Urban Water Management Plan Update; and

WHEREAS, LADWP anticipates that its projected water supplies available during normal, single-dry, and multiple-dry water years as included in the 20-year projection contained in its Urban Water Management Plan can accommodate the projected water demand associated with the Project, in addition to the existing and planned future uses of LADWP's system.

NOW, THEREFORE, BE IT RESOLVED, that the LADWP Board of Water and Power Commissioners finds that LADWP can provide sufficient domestic water supplies to the Project and approves the water supply assessment prepared for the Project, now on file with the Secretary of the Board, and directs that the assessment and a certified copy of this resolution be transmitted to the City of Los Angeles Department of City Planning.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution adopted by the Board of Water and Power Commissioners of the City of Los Angeles at its meeting held MAR 22 2005

Barbara E. Moseley
Secretary

APPROVED AS TO FORM AND LEGALITY
ROCKARD J. DELGADILLO, CITY ATTORNEY

FEB 28 2005

BY
JOSEPH A. BRAJEVICH
Deputy City Attorney

LOS ANGELES DEPARTMENT OF WATER AND POWER
WATER SUPPLY ASSESSMENT
FOR THE 9TH & FIGUEROA PROJECT

Prepared by the Los Angeles Department of Water and Power
Water Resources Business Unit

February 23, 2005

TABLE I

Use[1]	Quantity	Unit	Water Use Factor[2] (gpd/unit)	Water Use (gpd)	Water Use (af/y)
Proposed					
Loft	75	du	80	6,000	7
1-Bd Multi-Family Dwelling	304	du	120	36,480	41
2-Bd Multi-Family Dwelling	252	du	160	40,320	45
Commercial	39,414	sf	0.08	3,153	4
Auto Parking Structure[3]	363,157	sf	0.02	7,263	8
Outdoor Water Use[4]				17,821	20
			Total:	**111,037**	**124**

Notes:

[1] Provided by the Los Angeles Department of City Planning

[2] Based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, dated 3/20/2004. Uses not listed are estimated by the closest type of use available in the table.

[3] Auto parking structure square footage provided by Shane Parker of Christopher A. Joseph & Associates.

[4] Estimated to be 28% for commercial and 18% for multi-family dwellings.

gpd - gallons per day sf - square feet af/y - acre-feet per year du - dwelling unit

Water Demand Forecast

LADWP's UWMP forecasts a 25-percent increase in water demand in its service area by the Year 2020, or an average of 1.3 percent annually. This corresponds to an estimated water demand of 800,000 acre-feet by the Year 2020, as shown on Table II. The forecast is based on population growth, growth among the customer class sectors, weather, and conservation. Customer class sectors are composed of various water use groups, namely single-family, multi-family, commercial, industrial, and governmental. Weather consideration takes into account both present and past temperature and precipitation data. This forecast assumes that normal weather conditions will occur in the future.