APPENDIX 1.0

Notice of Preparation/Responses to the NOP

Notice of Preparation

To: ______________________

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From: City of Glendale

633 East Broadway, Room 103

Glendale, California 91206

Subject: Notice of Preparation of a Draft Environmental Impact Report

CCTAN/Colorado Street Mixed Use Project

The City of Glendale will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for this project. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approvals for the project.

The project description, location, and the probable environmental effects are described in the attached materials. A copy of the Initial Study (is ☐ is not ☒) attached.

Due to the time limits mandated by state law, your response must be sent at the earliest possible time but not later than 30 days after receipt of this notice.

Please send your response to Ms. Vilia Zemaitaitis, Senior Planner, City of Glendale, 633 East Broadway, Room 103, Glendale, California 91206. You may also email your response to: vzemaitaitis@ci.glendale.ca.us. Please provide the name of a contact person at your agency.

Date: 9/26/13 Signature: Vilia Zemaitaitis

Vilia Zemaitaitis

Title: Senior Planner

Telephone: (818) 937-8154

Reference: California Administrative Code, Title 14 (*State CEQA Guidelines*), Sections 15082(a), 15103, 15375.

CCTAN/COLORADO STREET MIXED USE PROJECT

LEAD AGENCY

City of Glendale
Community Development Department, Planning Division
633 East Broadway, Room 103
Glendale, California 91206

PROJECT LOCATION AND LAND USES

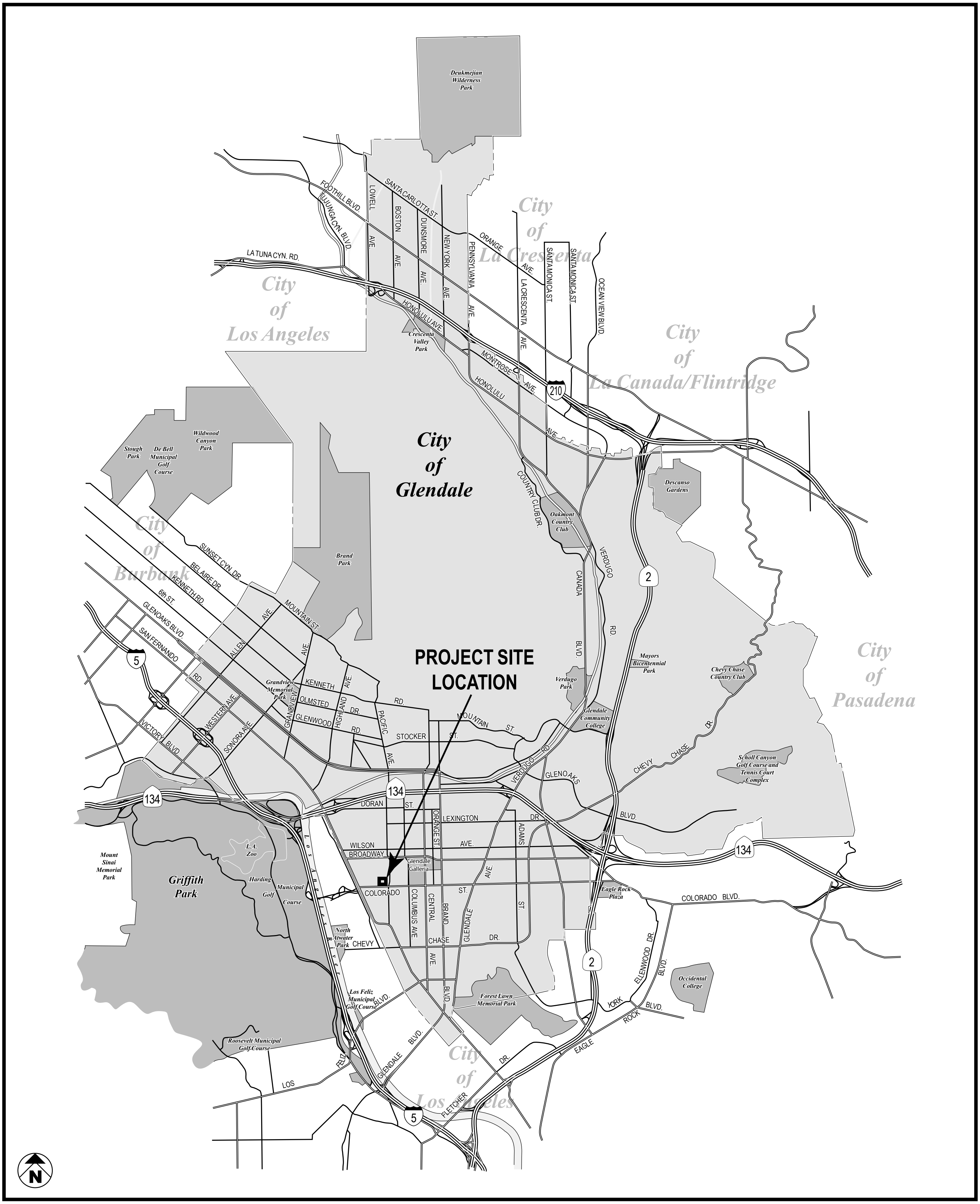
Figure 1, **Regional Location**, illustrates the location of the project site in the western portion of the City of Glendale, approximately 10 miles north of the City of Los Angeles Civic Center and 5 miles west of the City of Pasadena Civic Center. SR-134 and SR-2 (the Ventura and Glendale Freeways) and Interstate 5 (the Golden State Freeway) provide regional access to the project site. As illustrated on **Figure 2, Project Location Map**, the project site consists of four continuous parcels located adjacent to the north of West Colorado Street and west of South Pacific Avenue. The addresses are: 525 W. Colorado Street, 523 W. Colorado Street, 515 W. Colorado Street, and 507 W. Colorado Street.

The project site is bound on the south by West Colorado Street on the west by an existing three story commercial building, on the north by four, existing single family residences and two, three-story multi-family buildings, and on the east by an existing gas station. The site is 0.99 acres (43,125 square feet) and is developed with one single-story commercial building and a child care day center, surface parking lots, and a vacant paved lot. The site is designated as Mixed Use on the City of Glendale General Plan Land Use Map and Commercial/Residential Mixed Use (SFMU) on the City's Zoning Map.

PROJECT DESCRIPTION

The applicant, CMGT Construction Company, is proposing to develop a mixed-use project consisting of 90 multi-family residential units, 18,000 square feet of medical office space, and 1,000 square feet of coffee shop space in a five-story building. The development features four "structures" connected at the podium level and by the two levels of subterranean parking underneath.

Figure 3, Conceptual Site Plan illustrates the general layout for the first floor. The proposed project would consist of the medical office and coffee shop space on the first floor and the residential units on four floors above this commercial space. A total of 256 subterranean parking spaces would be provided onsite per the Glendale Municipal Code (GMC). Access to the subterranean garage would be provided via one driveway on Colorado Street. A drop–off, circular driveway would be provided for the medical office space proposed on the ground floor of the building adjacent to West Colorado Street. The coffee shop space would be provided on the ground floor of the easternmost corner of the complex. The project would provide open space areas in the northwest portion of the site and along West Colorado Street.



SOURCE: Meridian Consultants, LLC - May 2013

FIGURE **1**

Meridian Consultants

Regional Project Location

046-001-13

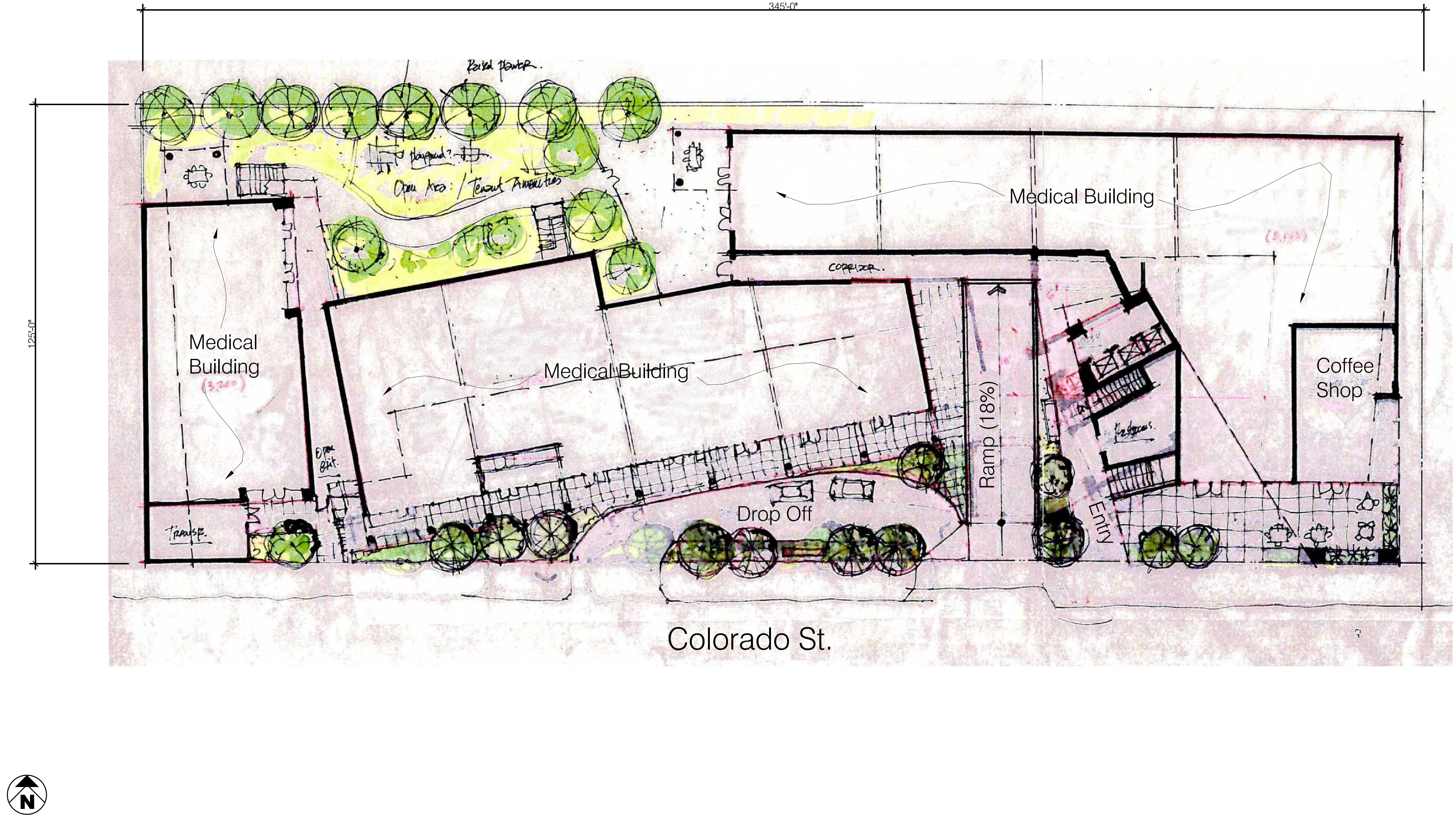
SOURCE: Google Earth – 2013; Meridian Consultants, LLC – September 2013.

FIGURE **2**

Meridian Consultants

Project Location Map

046-001-13



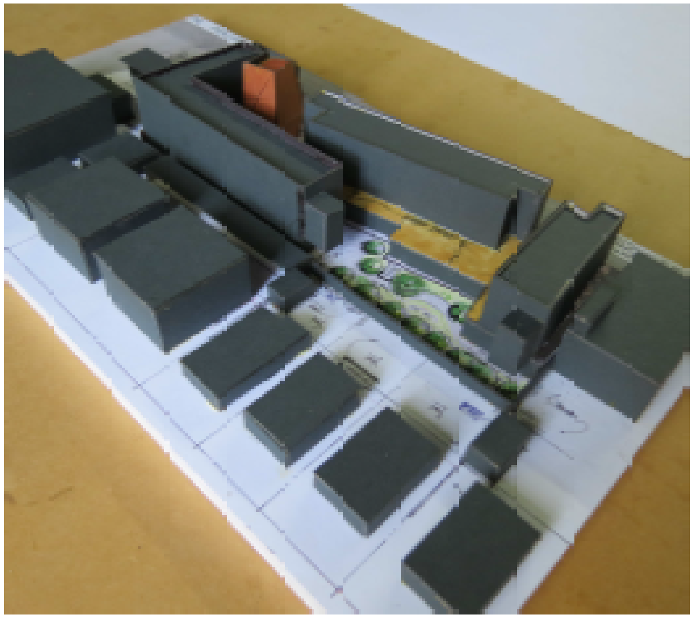
SOURCE: ArquiTaller Inc. - September 2013

FIGURE 3

Meridian Consultants

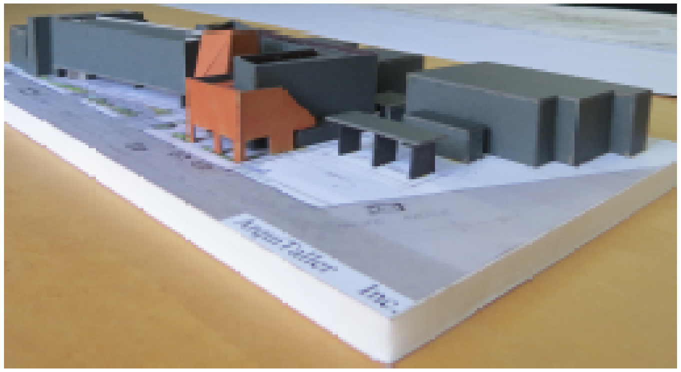
Conceptual Site Plan

046-001-13



Looking south by south east towards West Colorado Street

Looking north towards the site



Looking north by northwest towards West Colorado Street/
South Pacific Avenue

N

0 25 50 100

APPROXIMATE SCALE IN FEET

SOURCE: ArquiTaller Inc. - September 2013

FIGURE **4**

Meridian
Consultants

Aerial View Model

The second floor would include 22 residential units, an activity room, and a landscaped terrace area for use by residents. The third and four floors would each contain 23 residential units and the fifth floor would contain 22 residential units. **Figure 4, Aerial View Model**, provides conceptual views of the proposed buildings from the south towards West Colorado Street, north and northwest towards West Colorado Street and South Pacific Avenue. The mixed use project would include 69 one-bedroom apartment units and 21 two-bedroom apartment units.

The project would involve the demolition of the existing buildings onsite. Site improvements and construction of the mixed use project would last approximately 18 months.

The proposed project includes the provision of affordable housing in accordance with Chapter 30.36, Density Bonus Incentives, of the Glendale Municipal Code, that provides incentives for the production of housing for very low, low income and senior households. These incentives apply to all zones where residential developments of five or more dwelling units are proposed and where the applicant proposes density beyond that permitted by the applicable zone. The incentives allowed by Chapter 30.36 include a reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum building standards, including but not limited to, a reduction in setback and square footage requirements and in the number of parking spaces. An applicant seeking a density bonus, incentive or concession is required to submit a Density Bonus Housing Plan identifying the allowed number of units, the number requested, and the amount of density bonus and the number and type of incentives or concessions requested.

State law indicates that a project is eligible for a 20 percent density bonus when at least 5 percent of the units are designated for very low income households or 10 percent of the units are designated for low income households. The proposed project would provide 5 percent of the units for very-low income households. The SFMU zone designation allows buildings on a site adjacent to the Moderate Density Residential (R-3050) zone to be up to four stories and 60 feet in height and a maximum density of 87 dwelling units per acre. The project site is 0.99 acres in size and would be allowed a maximum density of 86 dwelling units. In order to provide these affordable housing units, the project includes a request to exceed the SFMU zone story standard and unit allowance applicable to this site. The proposed project includes the development of a five-story building, 60 feet in overall height, and 4 additional residential units.

DISCRETIONARY ACTIONS/ENTITLEMENTS

Discretionary approval from the City of Glendale would be necessary for implementation of the project and may include, but are not limited to the following:

- Stage I/II Design Review;
- Density Bonus Housing Agreement; and
- Density Bonus Housing Plan.

PROBABLE ENVIRONMENTAL EFFECTS

Based on a preliminary review of the proposed project consistent with Section 15060 of the *California Environmental Quality Act (CEQA) Guidelines*, the Glendale Community Development Department has determined that an EIR should be prepared for this proposed project. In addition, consistent with Section 15082 of the *State CEQA Guidelines*, the Glendale Community Development Department has identified the following probable environmental effects of the project, which will be addressed in the EIR for this project:

- Aesthetic
- Greenhouse Gas Emissions
- Noise
- Public Services
- Transportation/Traffic
- Air Quality
- Land Use/Planning
- Population/Housing
- Recreation
- Utilities/Service Systems

The City of Glendale Community Development Department has determined that there is not a likelihood of potentially significant effects related to the following environmental topics. The EIR will include information on why these effects were determined not to be significant and are not addressed in detail in the EIR:

- Agriculture/Forestry Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Mineral Resources
- Biological Resources
- Geology/Soils
- Hydrology/Water Quality

The Glendale Community Development Department will consider comments received in response to this Notice of Preparation in determining the scope and content of the EIR for this project. Any comments provided should identify specific topics of environmental concern and your reason for suggesting the study of these topics in the EIR. Please provide your comments by **October 31, 2013**.

Please provide your comments in writing to:

City of Glendale
Community Development Department, Planning Division
633 East Broadway, Room 103
Glendale, California 91206
Attention: Vilia Zemaitaitis, Senior Planner

Thank you for your participation in the environmental review of this project.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

October 17, 2013

Vilia Zemaitaitis, Senior Planner
City of Glendale
Community Development Department, Planning Division
633 East Broadway, Room 103
Glendale, CA 91206

Notice of Preparation of a CEQA Document for the CCTAN/Colorado Street Mixed-Use Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are su bmitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: www.aqmd.gov/ceqa/hdbk.html. SCAQMD staff also recommends that the lead agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/ceqa/handbook/signthres.pdf. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at imacmillan@aqmd.gov or call me at (909) 396-3244.

Sincerely,

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

LAC131004-05
Control Number

Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952
213.922.2000 Tel
metro.net

Metro

October 28, 2013

Vilia Zemaitaitis
Senior Planner
City of Glendale
633 East Broadway, Room 103
Glendale, CA 91206

RE: CCTAN/Colorado Street Mixed Use Project –
Notice of Preparation of an Environmental Impact Report

Dear Ms. Zemaitaitis:

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is in receipt of the Notice of Preparation (NOP) of the Environmental Impact Report (EIR) for the proposed Colorado Street Mixed Use Project at 507-525 West Colorado Street. This letter conveys comments concerning issues that are germane to LACMTA's statutory responsibilities in relation to the proposed project facilities.

LACMTA must also notify the applicant that a Transportation Impact Analysis (TIA), with roadway and transit components, is required under the State of California Congestion Management Program (CMP) statute. The CMP TIA Guidelines are published in the "2010 Congestion Management Program for Los Angeles County", Appendix D (attached). The geographic area examined in the TIA must include the following, at a minimum:

1. All CMP arterial monitoring intersections, including monitored freeway on/off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. weekday peak hour (of adjacent street traffic).

2. If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions). Within the study area, the TIA must analyze at least one segment between monitored CMP intersections.

3. Mainline freeway-monitoring locations where the project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hour.

4. Caltrans must also be consulted through the NOP process to identify other specific locations to be analyzed on the state highway system.

The CMP TIA requirement also contains two separate impact studies covering roadways and transit, as outlined in Sections D.8.1 – D.9.4. If the TIA identifies no facilities for study based on the criteria above, no further traffic analysis is required. However, projects must still consider transit impacts. For all CMP TIA requirements please see the attached guidelines.

LACMTA looks forward to reviewing the Draft Environmental Impact Report. Please send the DEIR to:

LACMTA
CEQA Review Coordinator
One Gateway Plaza – 99-23-23
Los Angeles, CA 90005

If you have any questions regarding this response, please contact Marie Sullivan at 213-922-5667 or by email at sullivanma@metro.net.

Sincerely,

Nick Saponara
Development Review Manager, Countywide Planning

Attachment: CMP Appendix D: Guidelines for CMP Transportation Impact Analysis

APPENDIX

D

GUIDELINES FOR CMP TRANSPORTATION IMPACT ANALYSIS

Important Notice to User: This section provides detailed travel statistics for the Los Angeles area which will be updated on an ongoing basis. Updates will be distributed to all local jurisdictions when available. In order to ensure that impact analyses reflect the best available information, lead agencies may also contact MTA at the time of study initiation. Please contact MTA staff to request the most recent release of "Baseline Travel Data for CMP TIAs."

D.1 OBJECTIVE OF GUIDELINES

The following guidelines are intended to assist local agencies in evaluating impacts of land use decisions on the Congestion Management Program (CMP) system, through preparation of a regional transportation impact analysis (TIA). The following are the basic objectives of these guidelines:

- ☐ Promote consistency in the studies conducted by different jurisdictions, while maintaining flexibility for the variety of project types which could be affected by these guidelines.
- ☐ Establish procedures which can be implemented within existing project review processes and without ongoing review by MTA.
- ☐ Provide guidelines which can be implemented immediately, with the full intention of subsequent review and possible revision.

These guidelines are based on specific requirements of the Congestion Management Program, and travel data sources available specifically for Los Angeles County. References are listed in Section D.10 which provide additional information on possible methodologies and available resources for conducting TIAs.

D.2 GENERAL PROVISIONS

Exhibit D-7 provides the model resolution that local jurisdictions adopted containing CMP TIA procedures in 1993. TIA requirements should be fulfilled within the existing environmental review process, extending local traffic impact studies to include impacts to the regional system. In order to monitor activities affected by these requirements, Notices of Preparation (NOPs) must be submitted to MTA as a responsible agency. Formal MTA approval of individual TIAs is not required.

The following sections describe CMP TIA requirements in detail. In general, the competing objectives of consistency & flexibility have been addressed by specifying standard, or minimum, requirements and requiring documentation when a TIA varies from these standards.

D.3 PROJECTS SUBJECT TO ANALYSIS

In general a CMP TIA is required for all projects required to prepare an Environmental Impact Report (EIR) based on local determination. A TIA is not required if the lead agency for the EIR finds that traffic is not a significant issue, and does not require local or regional traffic impact analysis in the EIR. Please refer to Chapter 5 for more detailed information.

CMP TIA guidelines, particularly intersection analyses, are largely geared toward analysis of projects where land use types and design details are known. Where likely land uses are not defined (such as where project descriptions are limited to zoning designation and parcel size with no information on access location), the level of detail in the TIA may be adjusted accordingly. This may apply, for example, to some redevelopment areas and citywide general plans, or community level specific plans. In such cases, where project definition is insufficient for meaningful intersection level of service analysis, CMP arterial segment analysis may substitute for intersection analysis.

D.4 STUDY AREA

The geographic area examined in the TIA must include the following, at a minimum:

- ☐ All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).
- ☐ If CMP arterial segments are being analyzed rather than intersections (see Section D.3), the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions). Within the study area, the TIA must analyze at least one segment between monitored CMP intersections.
- ☐ Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.
- ☐ Caltrans must also be consulted through the Notice of Preparation (NOP) process to identify other specific locations to be analyzed on the state highway system.

If the TIA identifies no facilities for study based on these criteria, no further traffic analysis is required. However, projects must still consider transit impacts (Section D.8.4).

D.5 BACKGROUND TRAFFIC CONDITIONS

The following sections describe the procedures for documenting and estimating background, or non-project related traffic conditions. Note that for the purpose of a TIA, these background estimates must include traffic from all sources without regard to the exemptions specified in CMP statute (e.g., traffic generated by the provision of low and very low income housing, or trips originating outside Los Angeles County. Refer to Chapter 5, Section 5.2.3 for a complete list of exempted projects).

D.5.1 Existing Traffic Conditions. Existing traffic volumes and levels of service (LOS) on the CMP highway system within the study area must be documented. Traffic counts must be less than one year old at the time the study is initiated, and collected in accordance with CMP highway monitoring requirements (see Appendix A). Section D.8.1 describes TIA LOS calculation requirements in greater detail. Freeway traffic volume and LOS data provided by Caltrans is also provided in Appendix A.

D.5.2 Selection of Horizon Year and Background Traffic Growth. Horizon year(s) selection is left to the lead agency, based on individual characteristics of the project being analyzed. In general, the horizon year should reflect a realistic estimate of the project completion date. For large developments phased over several years, review of intermediate milestones prior to buildout should also be considered.

At a minimum, horizon year background traffic growth estimates must use the generalized growth factors shown in Exhibit D-1. These growth factors are based on regional modeling efforts, and estimate the general effect of cumulative development and other socioeconomic changes on traffic throughout the region. Beyond this minimum, selection among the various methodologies available to estimate horizon year background traffic in greater detail is left to the lead agency. Suggested approaches include consultation with the jurisdiction in which the intersection under study is located, in order to obtain more detailed traffic estimates based on ongoing development in the vicinity.

D.6 PROPOSED PROJECT TRAFFIC GENERATION

Traffic generation estimates must conform to the procedures of the current edition of Trip Generation, by the Institute of Transportation Engineers (ITE). If an alternative methodology is used, the basis for this methodology must be fully documented.

Increases in site traffic generation may be reduced for existing land uses to be removed, if the existing use was operating during the year the traffic counts were collected. Current traffic generation should be substantiated by actual driveway counts; however, if infeasible, traffic may be estimated based on a methodology consistent with that used for the proposed use.

Regional transportation impact analysis also requires consideration of trip lengths. Total site traffic generation must therefore be divided into work and non-work-related trip purposes in order to reflect observed trip length differences. Exhibit D-2 provides factors which indicate trip purpose breakdowns for various land use types.

For lead agencies who also participate in CMP highway monitoring, it is recommended that any traffic counts on CMP facilities needed to prepare the TIA should be done in the manner outlined in Chapter 2 and Appendix A. If the TIA traffic counts are taken within one year of the deadline for submittal of CMP highway monitoring data, the local jurisdiction would save the cost of having to conduct the traffic counts twice.

D.7 TRIP DISTRIBUTION

For trip distribution by direct/manual assignment, generalized trip distribution factors are provided in Exhibit D-3, based on regional modeling efforts. These factors indicate Regional Statistical Area (RSA)-level tripmaking for work and non-work trip purposes.

(These RSAs are illustrated in Exhibit D-4.) For locations where it is difficult to determine the project site RSA, census tract/RSA correspondence tables are available from MTA.

Exhibit D-5 describes a general approach to applying the preceding factors. Project trip distribution must be consistent with these trip distribution and purpose factors; the basis for variation must be documented.

Local agency travel demand models disaggregated from the SCAG regional model are presumed to conform to this requirement, as long as the trip distribution functions are consistent with the regional distribution patterns. For retail commercial developments, alternative trip distribution factors may be appropriate based on the market area for the specific planned use. Such market area analysis must clearly identify the basis for the trip distribution pattern expected.

D.8 IMPACT ANALYSIS

CMP Transportation Impact Analyses contain two separate impact studies covering roadways and transit. Section Nos. D.8.1-D.8.3 cover required roadway analysis while Section No. D.8.4 covers the required transit impact analysis. Section Nos. D.9.1-D.9.4 define the requirement for discussion and evaluation of alternative mitigation measures.

D.8.1 Intersection Level of Service Analysis. The LA County CMP recognizes that individual jurisdictions have wide ranging experience with LOS analysis, reflecting the variety of community characteristics, traffic controls and street standards throughout the county. As a result, the CMP acknowledges the possibility that no single set of assumptions should be mandated for all TIAs within the county.

However, in order to promote consistency in the TIAs prepared by different jurisdictions, CMP TIAs must conduct intersection LOS calculations using either of the following methods:

- ☐ The Intersection Capacity Utilization (ICU) method as specified for CMP highway monitoring (see Appendix A); or
- ☐ The Critical Movement Analysis (CMA) / Circular 212 method.

Variation from the standard assumptions under either of these methods for circumstances at particular intersections must be fully documented.

TIAs using the 1985 or 1994 Highway Capacity Manual (HCM) operational analysis must provide converted volume-to-capacity based LOS values, as specified for CMP highway monitoring in Appendix A.

D.8.2 Arterial Segment Analysis. For TIAs involving arterial segment analysis, volume-to-capacity ratios must be calculated for each segment and LOS values assigned using the V/C-LOS equivalency specified for arterial intersections. A capacity of 800 vehicles per hour per through traffic lane must be used, unless localized conditions necessitate alternative values to approximate current intersection congestion levels.

D.8.3 Freeway Segment (Mainline) Analysis. For the purpose of CMP TIAs, a simplified analysis of freeway impacts is required. This analysis consists of a demand-to-capacity calculation for the affected segments, and is indicated in Exhibit D-6.

D.8.4 Transit Impact Review. CMP transit analysis requirements are met by completing and incorporating into an EIR the following transit impact analysis:

☐ Evidence that affected transit operators received the Notice of Preparation.

☐ A summary of existing transit services in the project area. Include local fixed-route services within a ¼ mile radius of the project; express bus routes within a 2 mile radius of the project, and; rail service within a 2 mile radius of the project.

☐ Information on trip generation and mode assignment for both AM and PM peak hour periods as well as for daily periods. Trips assigned to transit will also need to be calculated for the same peak hour and daily periods. Peak hours are defined as 7:30-8:30 AM and 4:30-5:30 PM. Both "peak hour" and "daily" refer to average weekdays, unless special seasonal variations are expected. If expected, seasonal variations should be described.

☐ Documentation of the assumption and analyses that were used to determine the number and percent of trips assigned to transit. Trips assigned to transit may be calculated along the following guidelines:

- Multiply the total trips generated by 1.4 to convert vehicle trips to person trips;
- For each time period, multiply the result by one of the following factors:

3.5% of Total Person Trips Generated for most cases, except:

10%	primarily Residential within 1/4 mile of a CMP transit center
15%	primarily Commercial within 1/4 mile of a CMP transit center
7%	primarily Residential within 1/4 mile of a CMP multi-modal transportation center
9%	primarily Commercial within 1/4 mile of a CMP multi-modal transportation center
5%	primarily Residential within 1/4 mile of a CMP transit corridor
7%	primarily Commercial within 1/4 mile of a CMP transit corridor
0%	if no fixed route transit services operate within one mile of the project

To determine whether a project is primarily residential or commercial in nature, please refer to the CMP land use categories listed and defined in Appendix E, *Guidelines for New Development Activity Tracking and Self Certification*. For projects that are only partially within the above one-quarter mile radius, the base rate (3.5% of total trips generated) should be applied to all of the project buildings that touch the radius perimeter.

☐ Information on facilities and/or programs that will be incorporated in the development plan that will encourage public transit use. Include not only the jurisdiction's TDM Ordinance measures, but other project specific measures.

☐ Analysis of expected project impacts on current and future transit services and proposed project mitigation measures, and;

☐ Selection of final mitigation measures remains at the discretion of the local jurisdiction/lead agency. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the existing mitigation monitoring requirements of CEQA.

D.9 IDENTIFICATION AND EVALUATION OF MITIGATION

D.9.1 Criteria for Determining a Significant Impact. For purposes of the CMP, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$), causing LOS F ($V/C > 1.00$); if the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$). The lead agency may apply a more stringent criteria if desired.

D.9.2 Identification of Mitigation. Once the project has been determined to cause a significant impact, the lead agency must investigate measures which will mitigate the impact of the project. Mitigation measures proposed must clearly indicate the following:

☐ Cost estimates, indicating the fair share costs to mitigate the impact of the proposed project. If the improvement from a proposed mitigation measure will exceed the impact of the project, the TIA must indicate the proportion of total mitigation costs which is attributable to the project. This fulfills the statutory requirement to exclude the costs of mitigating inter-regional trips.

☐ Implementation responsibilities. Where the agency responsible for implementing mitigation is not the lead agency, the TIA must document consultation with the implementing agency regarding project impacts, mitigation feasibility and responsibility.

Final selection of mitigation measures remains at the discretion of the lead agency. The TIA must, however, provide a summary of impacts and mitigation measures. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the mitigation monitoring requirements contained in CEQA.

D.9.3 Project Contribution to Planned Regional Improvements. If the TIA concludes that project impacts will be mitigated by anticipated regional transportation improvements, such as rail transit or high occupancy vehicle facilities, the TIA must document:

☐ Any project contribution to the improvement, and

☐ The means by which trips generated at the site will access the regional facility.

D.9.4 Transportation Demand Management (TDM). If the TIA concludes or assumes that project impacts will be reduced through the implementation of TDM measures, the TIA must document specific actions to be implemented by the project which substantiate these conclusions.

D.10 REFERENCES

1. *Traffic Access and Impact Studies for Site Development: A Recommended Practice*, Institute of Transportation Engineers, 1991.
2. *Trip Generation*, 5th Edition, Institute of Transportation Engineers, 1991.
3. *Travel Forecast Summary: 1987 Base Model - Los Angeles Regional Transportation Study (LARTS)*, California State Department of Transportation (Caltrans), February 1990.
4. *Traffic Study Guidelines*, City of Los Angeles Department of Transportation (LADOT), July 1991.
5. *Traffic/Access Guidelines*, County of Los Angeles Department of Public Works.
6. *Building Better Communities*, Sourcebook, Coordinating Land Use and Transit Planning, American Public Transit Association.
7. *Design Guidelines for Bus Facilities*, Orange County Transit District, 2nd Edition, November 1987.
8. *Coordination of Transit and Project Development*, Orange County Transit District, 1988.
9. *Encouraging Public Transportation Through Effective Land Use Actions*, Municipality of Metropolitan Seattle, May 1987.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN, JR., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, TRANSPORTATION PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
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Flex your power!
Be energy efficient!

October 31, 2013

Ms. Vilia Zemaitaitis
City of Glendale
633 E. Broadway, Room 103
Glendale, CA 91206

IGR/CEQA No. 131004AL-NOP
CCTAN/Colorado Street Mixed Use Project
Vic. LA-5, PM 25.78, LA-134, PM R6.574
SCH # 2013101009

Dear Ms. Zemaitaitis:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project proposes development of a mixed-uses consisting of 90-multi-family units, 18,000 s.f. of medical office space, and 1,000 s.f. of coffee shop space in a five-story building. The project will replace the existing child care center and office space.

We have received a traffic study prepared by KOA Corporation, dated October 3, 2013. The traffic study does not analyze the State facilities, and we have some concerns about the Project Trip Generation and cumulative traffic impact. To assist in evaluating the impacts of this project on State transportation facilities, a supplemental traffic study should be prepared prior to preparing the Draft Environmental Impact Report (DEIR). Please refer the project's traffic consultant to Caltrans' traffic study guide Website:

http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf

Listed below are some elements of what is generally expected in the traffic study:

1. Presentations of assumptions and methods used to develop trip generation, trip distribution, choice of travel mode, and assignments of trips to I-5, and on/off ramps at 142 (Colorado Street) and SR-134 and on/off ramps at 7A at N Pacific Ave. Caltrans has concerns about queuing of vehicles using off-ramps that will back into the mainline through lanes. It is recommended that the City determine whether project-related plus cumulative traffic is expected to cause long queues on the on and off-ramps. We would like to meet with the traffic consultant to identify study locations on the State facilities before preparing the Environmental Impact Report (EIR).

2. Consistency of project travel modeling with other regional and local modeling forecasts and with travel data. The Department may use indices to verify the results and any differences or inconsistencies must be thoroughly explained.

3. Analysis of ADT, AM and PM peak-hour volumes for both the existing and future conditions in the affected area. Utilization of transit lines and vehicles, and of all facilities, should be

realistically estimated. Future conditions should include build-out of all projects and any plan-horizon years. (see next item)

4. Inclusion of all appropriate traffic volumes. Analysis should include existing traffic, traffic generated by the project, cumulative traffic generated from all specific approved developments in the area, and traffic growth other than from the project and developments.

5. Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts. These mitigation discussions should include, but not be limited to, the following:

   - Description of Transportation Infrastructure Improvements
   - Financial Costs, Funding Sources and Financing
   - Sequence and Scheduling Considerations
   - Implementation Responsibilities, Controls, and Monitoring

   Any mitigation involving transit or Transportation Demand Management (TDM) should be justified and the results conservatively estimated. Improvements involving dedication of land or physical construction may be favorably considered.

6. Caltrans may accept fair share contributions toward pre-established or future improvements on the State Highway System. Please use the following ratio when estimating project equitable share responsibility: additional traffic volume due to project implementation is divided by the total increase in the traffic volume (see Appendix "B" of the Guide).

   Please note that for purposes of determining project share of costs, the number of trips from the project on each traveling segment or element is estimated in the context of forecasted traffic volumes, which include build-out of all approved and not yet approved projects and other sources of growth. Analytical methods such as select-zone travel forecast modeling might be used.

   Please be reminded that as the responsible agency under CEQA, the Department has authority to determine the required freeway analysis for this project and is responsible for obtaining measures that will off-set project vehicle trip generation that worsens State Highway facilities. CEQA allows the Caltrans to develop criteria for evaluating impacts on the facilities that it manages. In addition, the County of Los Angeles Congestion Management Program (CMP) guidelines state that the Caltrans should be consulted for the analysis of State facilities. State Routes mentioned in item #1 should be analyzed, preferably using methods suggested in the Caltrans' Traffic Impact Study Guide. To help determine the appropriate scope, we request that a select zone model run is performed. We welcome the opportunity to provide consultation regarding the Department's preferred scope and methods of analysis.

We look forward to reviewing a supplemental traffic study and expect to receive a copy from the State Clearinghouse when the DEIR is completed. Should you wish to expedite the review process or receive early feedback from the Department please feel free to send a copy of the DEIR directly to our office.

As discussed in a telephone conversation on October 28, 2013 between Mr. Wayne Ko, city Engineer and Mr. Alan Lin, Project Coordinator, we would like to assist the City in the preparation of a defensible traffic analysis for this and other developments. We extend an invitation to meet with the City and the traffic consultant in the process to discuss potential traffic impacts to the State facilities and possible mitigation measures which should be identified in the Circulation Element of the General Plan prior to the preparation of the EIR.

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 131004AL.

Sincerely,

Elmer Alvarez for,

DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

APPENDIX 4.2

Air Quality and Greenhouse Gas Calculations

Colorado Mixed Use Project

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	18.00	1000sqft	0.00	18,000.00	0
Fast Food Restaurant w/o Drive Thru	1.00	1000sqft	0.00	1,000.00	0
Apartments Mid Rise	90.00	Dwelling Unit	0.99	85,000.00	255

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2016
Utility Company	Glendale Water & Power				
CO2 Intensity (lb/MWhr)	1115.33	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proejct specific parameters from EIR

Construction Phase - Actual construction period per project - 18 months

Demolition -

Grading - Project site size

Vehicle Trips - Fast Food traffic rate (which is actually a onsite coffee shop) has been adjusted to account for 701 existing trips onsite.

Woodstoves - Project does not contain fireplaces or woodstoves

Water And Wastewater - Water usage from EIR water supply section - outdoor use for entire project is contained under residential uses.

Solid Waste - Solid waste generation from EIR.

Construction Off-road Equipment Mitigation - Construction requirement for 2014

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Required per City Ordinance

Water Mitigation -

Waste Mitigation - Per City of Glendale Ordinance

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	2.00	120.00
tblConstructionPhase	PhaseEndDate	4/29/2016	2/4/2016
tblConstructionPhase	PhaseStartDate	2/6/2016	11/13/2015
tblConstructionPhase	PhaseStartDate	3/21/2015	3/23/2015
tblConstructionPhase	PhaseStartDate	10/4/2014	10/6/2014
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	76.50	0.00
tblFireplaces	NumberNoFireplace	9.00	0.00
tblFireplaces	NumberWood	4.50	0.00
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	90,000.00	85,000.00
tblLandUse	LotAcreage	0.41	0.00
tblLandUse	LotAcreage	0.02	0.00
tblLandUse	LotAcreage	2.37	0.99
tblLandUse	Population	257.00	255.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	41.40	65.70
tblSolidWaste	SolidWasteGenerationRate	11.52	0.90
tblSolidWaste	SolidWasteGenerationRate	194.40	19.70
tblVehicleTrips	ST_TR	696.00	181.00
tblVehicleTrips	SU_TR	500.00	181.00
tblVehicleTrips	WD_TR	716.00	181.00

tblWater	IndoorWaterUseRate	5,863,862.31	3,723,000.00
tblWater	IndoorWaterUseRate	303,533.71	54,750.00
tblWater	IndoorWaterUseRate	2,258,649.68	1,642,000.00
tblWater	OutdoorWaterUseRate	3,696,782.76	54,993.00
tblWater	OutdoorWaterUseRate	19,374.49	0.00
tblWater	OutdoorWaterUseRate	430,218.99	0.00
tblWoodstoves	NumberCatalytic	4.50	0.00
tblWoodstoves	NumberNoncatalytic	4.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Year	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
	tons/yr										MT/yr					
2014	0.1102	1.2387	0.8885	1.9500e-003	0.1125	0.0538	0.1663	0.0414	0.0510	0.0924	0.0000	179.5730	179.5730	0.0114	0.0000	179.8127
2015	0.5990	2.5736	2.2070	4.0900e-003	0.1930	0.1427	0.3357	0.0637	0.1324	0.1961	0.0000	366.1701	366.1701	0.0456	0.0000	367.1277
2016	0.2587	0.2296	0.2174	3.7000e-004	0.0131	0.0150	0.0281	3.5000e-003	0.0140	0.0175	0.0000	31.7077	31.7077	5.2000e-003	0.0000	31.8169
Total	**0.9679**	**4.0419**	**3.3128**	**6.4100e-003**	**0.3186**	**0.2114**	**0.5301**	**0.1086**	**0.1974**	**0.3060**	**0.0000**	**577.4508**	**577.4508**	**0.0622**	**0.0000**	**578.7573**

Mitigated Construction

Year	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
	tons/yr										MT/yr					
2014	0.0562	0.9522	0.8490	1.9500e-003	0.0778	0.0305	0.1084	0.0254	0.0295	0.0549	0.0000	179.5730	179.5730	0.0114	0.0000	179.8126
2015	0.4403	1.5382	2.1437	4.0900e-003	0.1627	0.0642	0.2269	0.0483	0.0633	0.1115	0.0000	366.1699	366.1699	0.0456	0.0000	367.1275
2016	0.2405	0.1180	0.2130	3.7000e-004	0.0131	6.5300e-003	0.0196	3.5000e-003	6.5000e-003	0.0100	0.0000	31.7077	31.7077	5.2000e-003	0.0000	31.8169
Total	**0.7370**	**2.6084**	**3.2057**	**6.4100e-003**	**0.2536**	**0.1013**	**0.3549**	**0.0771**	**0.0993**	**0.1764**	**0.0000**	**577.4505**	**577.4505**	**0.0622**	**0.0000**	**578.7571**

	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	23.85	35.47	3.23	0.00	20.42	52.09	33.05	28.99	49.71	42.36	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	0.4607	0.0110	0.9413	5.0000e-005		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	1.5166	1.5166	1.5500e-003	0.0000	1.5490
Energy	7.1300e-003	0.0622	0.0352	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	387.8958	387.8958	9.6000e-003	3.0000e-003	389.0278
Mobile	0.8190	2.3651	9.1620	0.0202	1.3760	0.0316	1.4076	0.3682	0.0291	0.3973	0.0000	1,611.0980	1,611.0980	0.0667	0.0000	1,612.4989
Waste						0.0000	0.0000		0.0000	0.0000	17.5181	0.0000	17.5181	1.0353	0.0000	39.2592
Water						0.0000	0.0000		0.0000	0.0000	1.7194	36.0111	37.7305	0.1775	4.3600e-003	42.8116
Total	1.2868	2.4383	10.1385	0.0206	1.3760	0.0416	1.4177	0.3682	0.0391	0.4073	19.2376	2,036.5215	2,055.7591	1.2907	7.3600e-003	2,085.1466

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4607	0.0110	0.9413	5.0000e-005		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	1.5166	1.5166	1.5500e-003	0.0000	1.5490
Energy	6.3400e-003	0.0554	0.0316	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	369.9934	369.9934	9.1900e-003	2.8000e-003	371.0556
Mobile	0.7707	1.9931	7.9624	0.0166	1.1213	0.0261	1.1474	0.3000	0.0240	0.3241	0.0000	1,321.5884	1,321.5884	0.0556	0.0000	1,322.7549
Waste						0.0000	0.0000		0.0000	0.0000	8.7591	0.0000	8.7591	0.5177	0.0000	19.6296
Water						0.0000	0.0000		0.0000	0.0000	1.3756	28.8707	30.2463	0.1420	3.4900e-003	34.3091
Total	1.2377	2.0595	8.9353	0.0170	1.1213	0.0356	1.1569	0.3000	0.0335	0.3335	10.1346	1,721.9690	1,732.1036	0.7260	6.2900e-003	1,749.2982

	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	3.82	15.54	11.87	17.74	18.51	14.53	18.40	18.51	14.37	18.11	47.32	15.45	15.74	43.75	14.54	16.11

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2014	10/3/2014	5	25	
2	Grading	Grading	10/6/2014	3/20/2015	5	120	
3	Building Construction	Building Construction	3/23/2015	2/5/2016	5	230	
4	Architectural Coating	Architectural Coating	11/13/2015	2/4/2016	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 172,125; Residential Outdoor: 57,375; Non-Residential Indoor: 28,500; Non-Residential Outdoor: 9,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8000e-003	0.0000	6.8000e-003	1.0300e-003	0.0000	1.0300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.1562	0.1107	1.5000e-004		0.0116	0.0116		0.0111	0.0111	0.0000	13.6900	13.6900	2.8500e-003	0.0000	13.7498
Total	**0.0187**	**0.1562**	**0.1107**	**1.5000e-004**	**6.8000e-003**	**0.0116**	**0.0184**	**1.0300e-003**	**0.0111**	**0.0122**	**0.0000**	**13.6900**	**13.6900**	**2.8500e-003**	**0.0000**	**13.7498**

3.2 Demolition - 2014

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	7.3000e-004	0.0118	7.9900e-003	2.0000e-005	5.4000e-004	2.2000e-004	7.6000e-004	1.5000e-004	2.0000e-004	3.5000e-004	0.0000	2.1709	2.1709	2.0000e-005	0.0000	2.1713
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	6.2000e-004	9.1000e-004	9.4400e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3752	1.3752	8.0000e-005	0.0000	1.3769
Total	**1.3500e-003**	**0.0127**	**0.0174**	**4.0000e-005**	**1.9100e-003**	**2.3000e-004**	**2.1400e-003**	**5.1000e-004**	**2.1000e-004**	**7.3000e-004**	**0.0000**	**3.5461**	**3.5461**	**1.0000e-004**	**0.0000**	**3.5482**

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					2.5200e-003	0.0000	2.5200e-003	4.0000e-004	0.0000	4.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3300e-003	0.0748	0.0995	1.5000e-004		5.0300e-003	5.0300e-003		5.0300e-003	5.0300e-003	0.0000	13.6899	13.6899	2.8500e-003	0.0000	13.7498
Total	**3.3300e-003**	**0.0748**	**0.0995**	**1.5000e-004**	**2.5200e-003**	**5.0300e-003**	**7.5500e-003**	**4.0000e-004**	**5.0300e-003**	**5.4300e-003**	**0.0000**	**13.6899**	**13.6899**	**2.8500e-003**	**0.0000**	**13.7498**

3.2 Demolition - 2014

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	7.3000e-004	0.0118	7.9900e-003	2.0000e-005	5.4000e-004	2.2000e-004	7.6000e-004	1.5000e-004	2.0000e-004	3.5000e-004	0.0000	2.1709	2.1709	2.0000e-005	0.0000	2.1713
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	6.2000e-004	9.1000e-004	9.4400e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3752	1.3752	8.0000e-005	0.0000	1.3769
Total	**1.3500e-003**	**0.0127**	**0.0174**	**4.0000e-005**	**1.9100e-003**	**2.3000e-004**	**2.1400e-003**	**5.1000e-004**	**2.1000e-004**	**7.3000e-004**	**0.0000**	**3.5461**	**3.5461**	**1.0000e-004**	**0.0000**	**3.5482**

3.3 Grading - 2014

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					0.0483	0.0000	0.0483	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0470	0.3935	0.2789	3.8000e-004		0.0293	0.0293		0.0281	0.0281	0.0000	34.4987	34.4987	7.1900e-003	0.0000	34.6496
Total	**0.0470**	**0.3935**	**0.2789**	**3.8000e-004**	**0.0483**	**0.0293**	**0.0776**	**0.0253**	**0.0281**	**0.0534**	**0.0000**	**34.4987**	**34.4987**	**7.1900e-003**	**0.0000**	**34.6496**

3.3 Grading - 2014

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	0.0416	0.6741	0.4577	1.3300e-003	0.0521	0.0126	0.0646	0.0137	0.0116	0.0252	0.0000	124.3729	124.3729	1.0700e-003	0.0000	124.3953
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	1.5700e-003	2.3000e-003	0.0238	4.0000e-005	3.4600e-003	3.0000e-005	3.4900e-003	9.2000e-004	3.0000e-005	9.5000e-004	0.0000	3.4655	3.4655	2.1000e-004	0.0000	3.4698
Total	**0.0431**	**0.6764**	**0.4815**	**1.3700e-003**	**0.0555**	**0.0126**	**0.0681**	**0.0146**	**0.0116**	**0.0262**	**0.0000**	**127.8384**	**127.8384**	**1.2800e-003**	**0.0000**	**127.8651**

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					0.0179	0.0000	0.0179	9.8700e-003	0.0000	9.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3800e-003	0.1884	0.2506	3.8000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	34.4986	34.4986	7.1900e-003	0.0000	34.6496
Total	**8.3800e-003**	**0.1884**	**0.2506**	**3.8000e-004**	**0.0179**	**0.0127**	**0.0306**	**9.8700e-003**	**0.0127**	**0.0225**	**0.0000**	**34.4986**	**34.4986**	**7.1900e-003**	**0.0000**	**34.6496**

3.3 Grading - 2014

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	0.0416	0.6741	0.4577	1.3300e-003	0.0521	0.0126	0.0646	0.0137	0.0116	0.0252	0.0000	124.3729	124.3729	1.0700e-003	0.0000	124.3953
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	1.5700e-003	2.3000e-003	0.0238	4.0000e-005	3.4600e-003	3.0000e-005	3.4900e-003	9.2000e-004	3.0000e-005	9.5000e-004	0.0000	3.4655	3.4655	2.1000e-004	0.0000	3.4698
Total	**0.0431**	**0.6764**	**0.4815**	**1.3700e-003**	**0.0555**	**0.0126**	**0.0681**	**0.0146**	**0.0116**	**0.0262**	**0.0000**	**127.8384**	**127.8384**	**1.2800e-003**	**0.0000**	**127.8651**

3.3 Grading - 2015

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					0.0483	0.0000	0.0483	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0402	0.3403	0.2512	3.4000e-004		0.0249	0.0249		0.0238	0.0238	0.0000	31.0422	31.0422	6.3400e-003	0.0000	31.1753
Total	**0.0402**	**0.3403**	**0.2512**	**3.4000e-004**	**0.0483**	**0.0249**	**0.0732**	**0.0253**	**0.0238**	**0.0491**	**0.0000**	**31.0422**	**31.0422**	**6.3400e-003**	**0.0000**	**31.1753**

3.3 Grading - 2015

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	0.0330	0.5353	0.3820	1.2000e-003	0.0513	8.8600e-003	0.0602	0.0134	8.1500e-003	0.0216	0.0000	111.2160	111.2160	8.8000e-004	0.0000	111.2344
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	1.2700e-003	1.8700e-003	0.0194	4.0000e-005	3.1300e-003	3.0000e-005	3.1500e-003	8.3000e-004	3.0000e-005	8.6000e-004	0.0000	3.0343	3.0343	1.7000e-004	0.0000	3.0379
Total	**0.0342**	**0.5371**	**0.4014**	**1.2400e-003**	**0.0545**	**8.8900e-003**	**0.0634**	**0.0142**	**8.1800e-003**	**0.0224**	**0.0000**	**114.2502**	**114.2502**	**1.0500e-003**	**0.0000**	**114.2723**

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					0.0179	0.0000	0.0179	9.8700e-003	0.0000	9.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5800e-003	0.1705	0.2268	3.4000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	31.0422	31.0422	6.3400e-003	0.0000	31.1753
Total	**7.5800e-003**	**0.1705**	**0.2268**	**3.4000e-004**	**0.0179**	**0.0115**	**0.0294**	**9.8700e-003**	**0.0115**	**0.0213**	**0.0000**	**31.0422**	**31.0422**	**6.3400e-003**	**0.0000**	**31.1753**

3.3 Grading - 2015

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	0.0330	0.5353	0.3820	1.2000e-003	0.0513	8.8600e-003	0.0602	0.0134	8.1500e-003	0.0216	0.0000	111.2160	111.2160	8.8000e-004	0.0000	111.2344
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	1.2700e-003	1.8700e-003	0.0194	4.0000e-005	3.1300e-003	3.0000e-005	3.1500e-003	8.3000e-004	3.0000e-005	8.6000e-004	0.0000	3.0343	3.0343	1.7000e-004	0.0000	3.0379
Total	**0.0342**	**0.5371**	**0.4014**	**1.2400e-003**	**0.0545**	**8.8900e-003**	**0.0634**	**0.0142**	**8.1800e-003**	**0.0224**	**0.0000**	**114.2502**	**114.2502**	**1.0500e-003**	**0.0000**	**114.2723**

3.4 Building Construction - 2015

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	0.1483	1.4665	0.8464	1.1600e-003		0.1020	0.1020		0.0938	0.0938	0.0000	110.2716	110.2716	0.0329	0.0000	110.9629
Total	**0.1483**	**1.4665**	**0.8464**	**1.1600e-003**		**0.1020**	**0.1020**		**0.0938**	**0.0938**	**0.0000**	**110.2716**	**110.2716**	**0.0329**	**0.0000**	**110.9629**

3.4 Building Construction - 2015

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	0.0133	0.1356	0.1660	2.9000e-004	8.1600e-003	2.2800e-003	0.0104	2.3300e-003	2.1000e-003	4.4200e-003	0.0000	26.4264	26.4264	2.1000e-004	0.0000	26.4308
Worker	0.0324	0.0474	0.4921	9.8000e-004	0.0795	7.1000e-004	0.0802	0.0211	6.5000e-004	0.0218	0.0000	77.1030	77.1030	4.3600e-003	0.0000	77.1945
Total	**0.0457**	**0.1831**	**0.6581**	**1.2700e-003**	**0.0876**	**2.9900e-003**	**0.0906**	**0.0234**	**2.7500e-003**	**0.0262**	**0.0000**	**103.5294**	**103.5294**	**4.5700e-003**	**0.0000**	**103.6253**

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	0.0283	0.6222	0.8088	1.1600e-003		0.0392	0.0392		0.0392	0.0392	0.0000	110.2715	110.2715	0.0329	0.0000	110.9628
Total	**0.0283**	**0.6222**	**0.8088**	**1.1600e-003**		**0.0392**	**0.0392**		**0.0392**	**0.0392**	**0.0000**	**110.2715**	**110.2715**	**0.0329**	**0.0000**	**110.9628**

3.4 Building Construction - 2015

Mitigated Construction Off-Site

Category	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
	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	0.0133	0.1356	0.1660	2.9000e-004	8.1600e-003	2.2800e-003	0.0104	2.3300e-003	2.1000e-003	4.4200e-003	0.0000	26.4264	26.4264	2.1000e-004	0.0000	26.4308
Worker	0.0324	0.0474	0.4921	9.8000e-004	0.0795	7.1000e-004	0.0802	0.0211	6.5000e-004	0.0218	0.0000	77.1030	77.1030	4.3600e-003	0.0000	77.1945
Total	**0.0457**	**0.1831**	**0.6581**	**1.2700e-003**	**0.0876**	**2.9900e-003**	**0.0906**	**0.0234**	**2.7500e-003**	**0.0262**	**0.0000**	**103.5294**	**103.5294**	**4.5700e-003**	**0.0000**	**103.6253**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.0180	0.1782	0.1068	1.5000e-004		0.0122	0.0122		0.0112	0.0112	0.0000	13.8992	13.8992	4.1900e-003	0.0000	13.9872
Total	**0.0180**	**0.1782**	**0.1068**	**1.5000e-004**		**0.0122**	**0.0122**		**0.0112**	**0.0112**	**0.0000**	**13.8992**	**13.8992**	**4.1900e-003**	**0.0000**	**13.9872**

3.4 Building Construction - 2016

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	1.5000e-003	0.0153	0.0197	4.0000e-005	1.0400e-003	2.4000e-004	1.2800e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.3309	3.3309	2.0000e-005	0.0000	3.3314
Worker	3.7100e-003	5.4500e-003	0.0566	1.2000e-004	0.0101	9.0000e-005	0.0102	2.6900e-003	8.0000e-005	2.7700e-003	0.0000	9.4873	9.4873	5.1000e-004	0.0000	9.4980
Total	**5.2100e-003**	**0.0207**	**0.0763**	**1.6000e-004**	**0.0112**	**3.3000e-004**	**0.0115**	**2.9900e-003**	**3.0000e-004**	**3.2900e-003**	**0.0000**	**12.8182**	**12.8182**	**5.3000e-004**	**0.0000**	**12.8294**

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	3.6100e-003	0.0793	0.1031	1.5000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003	0.0000	13.8992	13.8992	4.1900e-003	0.0000	13.9872
Total	**3.6100e-003**	**0.0793**	**0.1031**	**1.5000e-004**		**5.0000e-003**	**5.0000e-003**		**5.0000e-003**	**5.0000e-003**	**0.0000**	**13.8992**	**13.8992**	**4.1900e-003**	**0.0000**	**13.9872**

3.4 Building Construction - 2016

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	1.5000e-003	0.0153	0.0197	4.0000e-005	1.0400e-003	2.4000e-004	1.2800e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.3309	3.3309	2.0000e-005	0.0000	3.3314
Worker	3.7100e-003	5.4500e-003	0.0566	1.2000e-004	0.0101	9.0000e-005	0.0102	2.6900e-003	8.0000e-005	2.7700e-003	0.0000	9.4873	9.4873	5.1000e-004	0.0000	9.4980
Total	**5.2100e-003**	**0.0207**	**0.0763**	**1.6000e-004**	**0.0112**	**3.3000e-004**	**0.0115**	**2.9900e-003**	**3.0000e-004**	**3.2900e-003**	**0.0000**	**12.8182**	**12.8182**	**5.3000e-004**	**0.0000**	**12.8294**

3.5 Architectural Coating - 2015

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	0.3223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1200e-003	0.0450	0.0333	5.0000e-005		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	4.4682	4.4682	5.8000e-004	0.0000	4.4804
Total	**0.3295**	**0.0450**	**0.0333**	**5.0000e-005**		**3.8700e-003**	**3.8700e-003**		**3.8700e-003**	**3.8700e-003**	**0.0000**	**4.4682**	**4.4682**	**5.8000e-004**	**0.0000**	**4.4804**

3.5 Architectural Coating - 2015

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	1.0900e-003	1.6000e-003	0.0167	3.0000e-005	2.6900e-003	2.0000e-005	2.7100e-003	7.1000e-004	2.0000e-005	7.4000e-004	0.0000	2.6084	2.6084	1.5000e-004	0.0000	2.6115
Total	**1.0900e-003**	**1.6000e-003**	**0.0167**	**3.0000e-005**	**2.6900e-003**	**2.0000e-005**	**2.7100e-003**	**7.1000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.6084**	**2.6084**	**1.5000e-004**	**0.0000**	**2.6115**

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	0.3223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0400e-003	0.0238	0.0321	5.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	4.4682	4.4682	5.8000e-004	0.0000	4.4804
Total	**0.3234**	**0.0238**	**0.0321**	**5.0000e-005**		**1.6600e-003**	**1.6600e-003**		**1.6600e-003**	**1.6600e-003**	**0.0000**	**4.4682**	**4.4682**	**5.8000e-004**	**0.0000**	**4.4804**

3.5 Architectural Coating - 2015

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	1.0900e-003	1.6000e-003	0.0167	3.0000e-005	2.6900e-003	2.0000e-005	2.7100e-003	7.1000e-004	2.0000e-005	7.4000e-004	0.0000	2.6084	2.6084	1.5000e-004	0.0000	2.6115
Total	**1.0900e-003**	**1.6000e-003**	**0.0167**	**3.0000e-005**	**2.6900e-003**	**2.0000e-005**	**2.7100e-003**	**7.1000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.6084**	**2.6084**	**1.5000e-004**	**0.0000**	**2.6115**

3.5 Architectural Coating - 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					
Archit. Coating	0.2302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6100e-003	0.0297	0.0236	4.0000e-005		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	3.1916	3.1916	3.8000e-004	0.0000	3.1995
Total	**0.2349**	**0.0297**	**0.0236**	**4.0000e-005**		**2.4600e-003**	**2.4600e-003**		**2.4600e-003**	**2.4600e-003**	**0.0000**	**3.1916**	**3.1916**	**3.8000e-004**	**0.0000**	**3.1995**

3.5 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	1.0300e-003	0.0107	2.0000e-005	1.9200e-003	2.0000e-005	1.9400e-003	5.1000e-004	2.0000e-005	5.2000e-004	0.0000	1.7988	1.7988	1.0000e-004	0.0000	1.8008
Total	**7.0000e-004**	**1.0300e-003**	**0.0107**	**2.0000e-005**	**1.9200e-003**	**2.0000e-005**	**1.9400e-003**	**5.1000e-004**	**2.0000e-005**	**5.2000e-004**	**0.0000**	**1.7988**	**1.7988**	**1.0000e-004**	**0.0000**	**1.8008**

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	0.2302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	0.0170	0.0229	4.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	3.1916	3.1916	3.8000e-004	0.0000	3.1995
Total	**0.2310**	**0.0170**	**0.0229**	**4.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**3.1916**	**3.1916**	**3.8000e-004**	**0.0000**	**3.1995**

3.5 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	1.0300e-003	0.0107	2.0000e-005	1.9200e-003	2.0000e-005	1.9400e-003	5.1000e-004	2.0000e-005	5.2000e-004	0.0000	1.7988	1.7988	1.0000e-004	0.0000	1.8008
Total	**7.0000e-004**	**1.0300e-003**	**0.0107**	**2.0000e-005**	**1.9200e-003**	**2.0000e-005**	**1.9400e-003**	**5.1000e-004**	**2.0000e-005**	**5.2000e-004**	**0.0000**	**1.7988**	**1.7988**	**1.0000e-004**	**0.0000**	**1.8008**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Improve Pedestrian Network

Category	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
	tons/yr										MT/yr					
Mitigated	0.7707	1.9931	7.9624	0.0166	1.1213	0.0261	1.1474	0.3000	0.0240	0.3241	0.0000	1,321.5884	1,321.5884	0.0556	0.0000	1,322.7549
Unmitigated	0.8190	2.3651	9.1620	0.0202	1.3760	0.0316	1.4076	0.3682	0.0291	0.3973	0.0000	1,611.0980	1,611.0980	0.0667	0.0000	1,612.4989

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	593.10	644.40	546.30	2,028,910	1,653,300
Fast Food Restaurant w/o Drive Thru	181.00	181.00	181.00	327,799	267,114
Medical Office Building	650.34	161.28	27.90	1,275,022	1,038,979
Total	1,424.44	986.68	755.20	3,631,731	2,959,392

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	307.2038	307.2038	7.9900e-003	1.6500e-003	307.8839
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	317.3171	317.3171	8.2500e-003	1.7100e-003	318.0195
NaturalGas Mitigated	6.3400e-003	0.0554	0.0316	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	62.7896	62.7896	1.2000e-003	1.1500e-003	63.1717
NaturalGas Unmitigated	7.1300e-003	0.0622	0.0352	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.5788	70.5788	1.3500e-003	1.2900e-003	71.0083

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					
Apartments Mid Rise	892846	4.8100e-003	0.0411	0.0175	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6457	47.6457	9.1000e-004	8.7000e-004	47.9356
Fast Food Restaurant w/o Drive Thru	233010	1.2600e-003	0.0114	9.5900e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4343	12.4343	2.4000e-004	2.3000e-004	12.5100
Medical Office Building	196740	1.0600e-003	9.6400e-003	8.1000e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4988	10.4988	2.0000e-004	1.9000e-004	10.5627
Total		**7.1300e-003**	**0.0622**	**0.0352**	**3.9000e-004**		**4.9300e-003**	**4.9300e-003**		**4.9300e-003**	**4.9300e-003**	**0.0000**	**70.5788**	**70.5788**	**1.3500e-003**	**1.2900e-003**	**71.0083**

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					
Fast Food Restaurant w/o Drive Thru	226226	1.2200e-003	0.0111	9.3200e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0723	12.0723	2.3000e-004	2.2000e-004	12.1457
Medical Office Building	168282	9.1000e-004	8.2500e-003	6.9300e-003	5.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	8.9802	8.9802	1.7000e-004	1.6000e-004	9.0348
Apartments Mid Rise	782124	4.2200e-003	0.0360	0.0153	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.7371	41.7371	8.0000e-004	7.7000e-004	41.9911
Total		**6.3500e-003**	**0.0554**	**0.0316**	**3.5000e-004**		**4.3800e-003**	**4.3800e-003**		**4.3800e-003**	**4.3800e-003**	**0.0000**	**62.7896**	**62.7896**	**1.2000e-003**	**1.1500e-003**	**63.1717**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	318776	161.2706	4.1900e-003	8.7000e-004	161.6276
Fast Food Restaurant w/o Drive Thru	46910	23.7320	6.2000e-004	1.3000e-004	23.7846
Medical Office Building	261540	132.3144	3.4400e-003	7.1000e-004	132.6073
Total		**317.3171**	**8.2500e-003**	**1.7100e-003**	**318.0195**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	315446	159.5860	4.1500e-003	8.6000e-004	159.9393
Fast Food Restaurant w/o Drive Thru	45423.5	22.9800	6.0000e-004	1.2000e-004	23.0309
Medical Office Building	246366	124.6378	3.2400e-003	6.7000e-004	124.9138
Total		**307.2038**	**7.9900e-003**	**1.6500e-003**	**307.8839**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4607	0.0110	0.9413	5.0000e-005		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	1.5166	1.5166	1.5500e-003	0.0000	1.5490
Unmitigated	0.4607	0.0110	0.9413	5.0000e-005		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	1.5166	1.5166	1.5500e-003	0.0000	1.5490

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	0.0553					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3758					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	0.0297	0.0110	0.9413	5.0000e-005		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	1.5166	1.5166	1.5500e-003	0.0000	1.5490
Total	**0.4607**	**0.0110**	**0.9413**	**5.0000e-005**		**5.0800e-003**	**5.0800e-003**		**5.0800e-003**	**5.0800e-003**	**0.0000**	**1.5166**	**1.5166**	**1.5500e-003**	**0.0000**	**1.5490**

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	0.0553					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3758					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	0.0297	0.0110	0.9413	5.0000e-005		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	1.5166	1.5166	1.5500e-003	0.0000	1.5490
Total	**0.4607**	**0.0110**	**0.9413**	**5.0000e-005**		**5.0800e-003**	**5.0800e-003**		**5.0800e-003**	**5.0800e-003**	**0.0000**	**1.5166**	**1.5166**	**1.5500e-003**	**0.0000**	**1.5490**

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	30.2463	0.1420	3.4900e-003	34.3091
Unmitigated	37.7305	0.1775	4.3600e-003	42.8116

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	3.723 / 0.054993	26.0151	0.1220	3.0000e-003	29.5057
Fast Food Restaurant w/o Drive Thru	0.05475 / 0	0.3780	1.7900e-003	4.0000e-005	0.4294
Medical Office Building	1.642 / 0	11.3374	0.0538	1.3200e-003	12.8766
Total		**37.7306**	**0.1775**	**4.3600e-003**	**42.8116**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	2.9784 / 0.054993	20.8739	0.0976	2.4000e-003	23.6650
Fast Food Restaurant w/o Drive Thru	0.0438 / 0	0.3024	1.4300e-003	4.0000e-005	0.3435
Medical Office Building	1.3136 / 0	9.0699	0.0430	1.0600e-003	10.3006
Total		**30.2463**	**0.1420**	**3.5000e-003**	**34.3091**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.7591	0.5177	0.0000	19.6296
Unmitigated	17.5181	1.0353	0.0000	39.2592

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	65.7	13.3365	0.7882	0.0000	29.8880
Fast Food Restaurant w/o Drive Thru	0.9	0.1827	0.0108	0.0000	0.4094
Medical Office Building	19.7	3.9989	0.2363	0.0000	8.9618
Total		**17.5181**	**1.0353**	**0.0000**	**39.2592**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	32.85	6.6683	0.3941	0.0000	14.9440
Fast Food Restaurant w/o Drive Thru	0.45	0.0914	5.4000e-003	0.0000	0.2047
Medical Office Building	9.85	1.9995	0.1182	0.0000	4.4809
Total		**8.7591**	**0.5176**	**0.0000**	**19.6296**

9.0 Operational Offroad

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

10.0 Vegetation

Colorado Mixed Use Project

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	18.00	1000sqft	0.00	18,000.00	0
Fast Food Restaurant w/o Drive Thru	1.00	1000sqft	0.00	1,000.00	0
Apartments Mid Rise	90.00	Dwelling Unit	0.99	85,000.00	255

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2016
Utility Company	Glendale Water & Power				
CO2 Intensity (lb/MWhr)	1115.33	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proejct specific parameters from EIR

Construction Phase - Actual construction period per project - 18 months

Demolition -

Grading - Project site size

Vehicle Trips - Fast Food traffic rate (which is actually a onsite coffee shop) has been adjusted to account for 701 existing trips onsite.

Woodstoves - Project does not contain fireplaces or woodstoves

Water And Wastewater - Water usage from EIR water supply section - outdoor use for entire project is contained under residential uses.

Solid Waste - Solid waste generation from EIR.

Construction Off-road Equipment Mitigation - Construction requirement for 2014

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Required per City Ordinance

Water Mitigation -

Waste Mitigation - Per City of Glendale Ordinance

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	2.00	120.00
tblConstructionPhase	PhaseEndDate	4/29/2016	2/4/2016
tblConstructionPhase	PhaseStartDate	2/6/2016	11/13/2015
tblConstructionPhase	PhaseStartDate	3/21/2015	3/23/2015
tblConstructionPhase	PhaseStartDate	10/4/2014	10/6/2014
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	76.50	0.00
tblFireplaces	NumberNoFireplace	9.00	0.00
tblFireplaces	NumberWood	4.50	0.00
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	90,000.00	85,000.00
tblLandUse	LotAcreage	0.41	0.00
tblLandUse	LotAcreage	0.02	0.00
tblLandUse	LotAcreage	2.37	0.99
tblLandUse	Population	257.00	255.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	41.40	65.70
tblSolidWaste	SolidWasteGenerationRate	11.52	0.90
tblSolidWaste	SolidWasteGenerationRate	194.40	19.70
tblVehicleTrips	ST_TR	696.00	181.00
tblVehicleTrips	SU_TR	500.00	181.00
tblVehicleTrips	WD_TR	716.00	181.00

tblWater	IndoorWaterUseRate	5,863,862.31	3,723,000.00
tblWater	IndoorWaterUseRate	303,533.71	54,750.00
tblWater	IndoorWaterUseRate	2,258,649.68	1,642,000.00
tblWater	OutdoorWaterUseRate	3,696,782.76	54,993.00
tblWater	OutdoorWaterUseRate	19,374.49	0.00
tblWater	OutdoorWaterUseRate	430,218.99	0.00
tblWoodstoves	NumberCatalytic	4.50	0.00
tblWoodstoves	NumberNoncatalytic	4.50	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					
2014	2.8879	33.6026	24.3332	0.0557	2.5997	1.3309	3.9306	0.8928	1.2587	2.1514	0.0000	5,672.9968	5,672.9968	0.2963	0.0000	5,679.2189
2015	20.8167	30.4699	23.1027	0.0556	2.7517	1.2512	3.9391	0.9301	1.1688	2.0535	0.0000	5,611.8492	5,611.8492	0.4511	0.0000	5,621.3224
2016	20.6506	17.7165	16.7411	0.0284	1.0314	1.1630	2.1944	0.2751	1.0857	1.3608	0.0000	2,689.4214	2,689.4214	0.4426	0.0000	2,698.7167
Total	**44.3551**	**81.7890**	**64.1770**	**0.1397**	**6.3827**	**3.7451**	**10.0640**	**2.0979**	**3.5131**	**5.5657**	**0.0000**	**13,974.2674**	**13,974.2674**	**1.1900**	**0.0000**	**13,999.2579**

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					
2014	1.6610	27.0912	23.4368	0.0557	2.0932	0.8028	2.8960	0.6356	0.7707	1.4062	0.0000	5,672.9968	5,672.9968	0.2963	0.0000	5,679.2189
2015	19.2935	24.5097	22.2453	0.0556	2.2452	0.7149	2.9601	0.6729	0.6899	1.3627	0.0000	5,611.8492	5,611.8492	0.4511	0.0000	5,621.3224
2016	19.2377	9.0954	16.4067	0.0284	1.0314	0.5061	1.5374	0.2751	0.5039	0.7790	0.0000	2,689.4214	2,689.4214	0.4426	0.0000	2,698.7167
Total	**40.1923**	**60.6963**	**62.0888**	**0.1397**	**5.3697**	**2.0238**	**7.3935**	**1.5836**	**1.9644**	**3.5480**	**0.0000**	**13,974.2674**	**13,974.2674**	**1.1900**	**0.0000**	**13,999.2579**

	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	9.39	25.79	3.25	0.00	15.87	45.96	26.54	24.52	44.08	36.25	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

Category	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
	lb/day										lb/day					
Area	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602
Energy	0.0391	0.3409	0.1929	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.3001	426.3001	8.1700e-003	7.8200e-003	428.8944
Mobile	5.5238	14.8044	57.9842	0.1274	8.9409	0.2027	9.1435	2.3888	0.1863	2.5751		11,206.3072	11,206.3072	0.4701		11,216.1787
Total	**8.1621**	**15.2333**	**65.7077**	**0.1299**	**8.9409**	**0.2703**	**9.2112**	**2.3888**	**0.2540**	**2.6427**	**0.0000**	**11,645.9811**	**11,645.9811**	**0.4919**	**7.8200e-003**	**11,658.7333**

Mitigated Operational

Category	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
	lb/day										lb/day					
Area	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602
Energy	0.0348	0.3034	0.1730	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.2528	379.2528	7.2700e-003	6.9500e-003	381.5609
Mobile	5.2186	12.4809	50.5321	0.1045	7.2857	0.1675	7.4532	1.9465	0.1540	2.1005		9,192.1353	9,192.1353	0.3915		9,200.3570
Total	**7.8527**	**12.8724**	**58.2358**	**0.1068**	**7.2857**	**0.2321**	**7.5178**	**1.9465**	**0.2186**	**2.1652**	**0.0000**	**9,584.7620**	**9,584.7620**	**0.4124**	**6.9500e-003**	**9,595.5781**

	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	3.79	15.50	11.37	17.78	18.51	14.11	18.38	18.51	13.90	18.07	0.00	17.70	17.70	16.15	11.13	17.70

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2014	10/3/2014	5	25	
2	Grading	Grading	10/6/2014	3/20/2015	5	120	
3	Building Construction	Building Construction	3/23/2015	2/5/2016	5	230	
4	Architectural Coating	Architectural Coating	11/13/2015	2/4/2016	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 172,125; Residential Outdoor: 57,375; Non-Residential Indoor: 28,500; Non-Residential Outdoor: 9,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2014

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					0.5441	0.0000	0.5441	0.0824	0.0000	0.0824			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.5441**	**0.9304**	**1.4745**	**0.0824**	**0.8904**	**0.9727**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0590	0.9254	0.6485	1.8600e-003	0.0439	0.0176	0.0615	0.0120	0.0162	0.0282		191.1753	191.1753	1.6500e-003		191.2100
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**0.1118**	**0.9963**	**1.3866**	**3.1900e-003**	**0.1557**	**0.0186**	**0.1743**	**0.0417**	**0.0171**	**0.0588**		**310.5951**	**310.5951**	**8.8900e-003**		**310.7819**

3.2 Demolition - 2014

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					0.2016	0.0000	0.2016	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.2016**	**0.4023**	**0.6039**	**0.0321**	**0.4023**	**0.4345**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0590	0.9254	0.6485	1.8600e-003	0.0439	0.0176	0.0615	0.0120	0.0162	0.0282		191.1753	191.1753	1.6500e-003		191.2100
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**0.1118**	**0.9963**	**1.3866**	**3.1900e-003**	**0.1557**	**0.0186**	**0.1743**	**0.0417**	**0.0171**	**0.0588**		**310.5951**	**310.5951**	**8.8900e-003**		**310.7819**

3.3 Grading - 2014

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					0.8046	0.0000	0.8046	0.4216	0.0000	0.4216			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.8046**	**0.9304**	**1.7350**	**0.4216**	**0.8904**	**1.3120**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.3422	21.0396	14.7423	0.0423	1.6833	0.3994	2.0827	0.4415	0.3674	0.8089		4,346.3302	4,346.3302	0.0376		4,347.1189
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**1.3950**	**21.1104**	**15.4804**	**0.0436**	**1.7951**	**0.4005**	**2.1956**	**0.4711**	**0.3683**	**0.8395**		**4,465.7499**	**4,465.7499**	**0.0448**		**4,466.6907**

3.3 Grading - 2014

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					0.2981	0.0000	0.2981	0.1644	0.0000	0.1644			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.2981**	**0.4023**	**0.7004**	**0.1644**	**0.4023**	**0.5668**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.3422	21.0396	14.7423	0.0423	1.6833	0.3994	2.0827	0.4415	0.3674	0.8089		4,346.3302	4,346.3302	0.0376		4,347.1189
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**1.3950**	**21.1104**	**15.4804**	**0.0436**	**1.7951**	**0.4005**	**2.1956**	**0.4711**	**0.3683**	**0.8395**		**4,465.7499**	**4,465.7499**	**0.0448**		**4,466.6907**

3.3 Grading - 2015

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					0.8046	0.0000	0.8046	0.4216	0.0000	0.4216			0.0000			0.0000
Off-Road	1.4120	11.9409	8.8138	0.0120		0.8748	0.8748		0.8359	0.8359		1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**1.4120**	**11.9409**	**8.8138**	**0.0120**	**0.8046**	**0.8748**	**1.6794**	**0.4216**	**0.8359**	**1.2575**		**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.1756	18.4654	13.6253	0.0422	1.8353	0.3116	2.1469	0.4788	0.2866	0.7654		4,295.6446	4,295.6446	0.0341		4,296.3615
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	0.0474	0.0636	0.6636	1.3300e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		115.5661	115.5661	6.6300e-003		115.7054
Total	**1.2230**	**18.5290**	**14.2889**	**0.0436**	**1.9471**	**0.3126**	**2.2597**	**0.5084**	**0.2875**	**0.7960**		**4,411.2107**	**4,411.2107**	**0.0408**		**4,412.0669**

3.3 Grading - 2015

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					0.2981	0.0000	0.2981	0.1644	0.0000	0.1644			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0120		0.4023	0.4023		0.4023	0.4023	0.0000	1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**0.2661**	**5.9808**	**7.9564**	**0.0120**	**0.2981**	**0.4023**	**0.7004**	**0.1644**	**0.4023**	**0.5668**	**0.0000**	**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.1756	18.4654	13.6253	0.0422	1.8353	0.3116	2.1469	0.4788	0.2866	0.7654		4,295.6446	4,295.6446	0.0341		4,296.3615
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	0.0474	0.0636	0.6636	1.3300e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		115.5661	115.5661	6.6300e-003		115.7054
Total	**1.2230**	**18.5290**	**14.2889**	**0.0436**	**1.9471**	**0.3126**	**2.2597**	**0.5084**	**0.2875**	**0.7960**		**4,411.2107**	**4,411.2107**	**0.0408**		**4,412.0669**

3.4 Building Construction - 2015

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	1.4538	14.3777	8.2983	0.0113		0.9995	0.9995		0.9195	0.9195		1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**1.4538**	**14.3777**	**8.2983**	**0.0113**		**0.9995**	**0.9995**		**0.9195**	**0.9195**		**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1345	1.3043	1.6689	2.8100e-003	0.0812	0.0225	0.1037	0.0231	0.0207	0.0438		284.2019	284.2019	2.3000e-003		284.2503
Worker	0.3362	0.4513	4.7116	9.4300e-003	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		820.5193	820.5193	0.0471		821.5082
Total	**0.4707**	**1.7556**	**6.3806**	**0.0122**	**0.8748**	**0.0295**	**0.9043**	**0.2336**	**0.0271**	**0.2607**		**1,104.7212**	**1,104.7212**	**0.0494**		**1,105.7585**

3.4 Building Construction - 2015

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1345	1.3043	1.6689	2.8100e-003	0.0812	0.0225	0.1037	0.0231	0.0207	0.0438		284.2019	284.2019	2.3000e-003		284.2503
Worker	0.3362	0.4513	4.7116	9.4300e-003	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		820.5193	820.5193	0.0471		821.5082
Total	**0.4707**	**1.7556**	**6.3806**	**0.0122**	**0.8748**	**0.0295**	**0.9043**	**0.2336**	**0.0271**	**0.2607**		**1,104.7212**	**1,104.7212**	**0.0494**		**1,105.7585**

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	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646		1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**1.3816**	**13.7058**	**8.2122**	**0.0113**		**0.9398**	**0.9398**		**0.8646**	**0.8646**		**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

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	0.1187	1.1511	1.5543	2.8100e-003	0.0813	0.0187	0.0999	0.0231	0.0172	0.0403		281.0605	281.0605	2.0800e-003		281.1043
Worker	0.3028	0.4070	4.2523	9.4200e-003	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		792.1578	792.1578	0.0433		793.0678
Total	**0.4215**	**1.5582**	**5.8066**	**0.0122**	**0.8749**	**0.0253**	**0.9002**	**0.2336**	**0.0233**	**0.2569**		**1,073.2184**	**1,073.2184**	**0.0454**		**1,074.1720**

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

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	0.1187	1.1511	1.5543	2.8100e-003	0.0813	0.0187	0.0999	0.0231	0.0172	0.0403		281.0605	281.0605	2.0800e-003		281.1043
Worker	0.3028	0.4070	4.2523	9.4200e-003	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		792.1578	792.1578	0.0433		793.0678
Total	**0.4215**	**1.5582**	**5.8066**	**0.0122**	**0.8749**	**0.0253**	**0.9002**	**0.2336**	**0.0233**	**0.2569**		**1,073.2184**	**1,073.2184**	**0.0454**		**1,074.1720**

3.5 Architectural Coating - 2015

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	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177
Total	**18.8259**	**2.5703**	**1.9018**	**2.9700e-003**		**0.2209**	**0.2209**		**0.2209**	**0.2209**		**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0663	0.0890	0.9291	1.8600e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		161.7925	161.7925	9.2900e-003		161.9875
Total	**0.0663**	**0.0890**	**0.9291**	**1.8600e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**161.7925**	**161.7925**	**9.2900e-003**		**161.9875**

3.5 Architectural Coating - 2015

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	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0367		282.2177
Total	**18.4787**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0663	0.0890	0.9291	1.8600e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		161.7925	161.7925	9.2900e-003		161.9875
Total	**0.0663**	**0.0890**	**0.9291**	**1.8600e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**161.7925**	**161.7925**	**9.2900e-003**		**161.9875**

3.5 Architectural Coating - 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					
Archit. Coating	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**18.7878**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0597	0.0803	0.8385	1.8600e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		156.2001	156.2001	8.5400e-003		156.3796
Total	**0.0597**	**0.0803**	**0.8385**	**1.8600e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**156.2001**	**156.2001**	**8.5400e-003**		**156.3796**

3.5 Architectural Coating - 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					
Archit. Coating	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**18.4787**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0597	0.0803	0.8385	1.8600e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		156.2001	156.2001	8.5400e-003		156.3796
Total	**0.0597**	**0.0803**	**0.8385**	**1.8600e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**156.2001**	**156.2001**	**8.5400e-003**		**156.3796**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

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	5.2186	12.4809	50.5321	0.1045	7.2857	0.1675	7.4532	1.9465	0.1540	2.1005		9,192.1353	9,192.1353	0.3915		9,200.3570
Unmitigated	5.5238	14.8044	57.9842	0.1274	8.9409	0.2027	9.1435	2.3888	0.1863	2.5751		11,206.3072	11,206.3072	0.4701		11,216.1787

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	593.10	644.40	546.30	2,028,910	1,653,300
Fast Food Restaurant w/o Drive Thru	181.00	181.00	181.00	327,799	267,114
Medical Office Building	650.34	161.28	27.90	1,275,022	1,038,979
Total	1,424.44	986.68	755.20	3,631,731	2,959,392

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	0.0348	0.3034	0.1730	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.2528	379.2528	7.2700e-003	6.9500e-003	381.5609
NaturalGas Unmitigated	0.0391	0.3409	0.1929	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.3001	426.3001	8.1700e-003	7.8200e-003	428.8944

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					
Apartments Mid Rise	2446.15	0.0264	0.2254	0.0959	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7827	287.7827	5.5200e-003	5.2800e-003	289.5341
Fast Food Restaurant w/o Drive Thru	638.384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Medical Office Building	539.014	5.8100e-003	0.0528	0.0444	3.2000e-004		4.0200e-003	4.0200e-003		4.0200e-003	4.0200e-003		63.4134	63.4134	1.2200e-003	1.1600e-003	63.7993
Total		**0.0391**	**0.3409**	**0.1929**	**2.1400e-003**		**0.0270**	**0.0270**		**0.0270**	**0.0270**		**426.3001**	**426.3001**	**8.1800e-003**	**7.8200e-003**	**428.8944**

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					
Fast Food Restaurant w/o Drive Thru	0.619796	6.6800e-003	0.0608	0.0510	3.6000e-004		4.6200e-003	4.6200e-003		4.6200e-003	4.6200e-003		72.9172	72.9172	1.4000e-003	1.3400e-003	73.3609
Medical Office Building	0.461047	4.9700e-003	0.0452	0.0380	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2408	54.2408	1.0400e-003	9.9000e-004	54.5709
Apartments Mid Rise	2.14281	0.0231	0.1975	0.0840	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.0949	252.0949	4.8300e-003	4.6200e-003	253.6291
Total		**0.0348**	**0.3034**	**0.1730**	**1.8900e-003**		**0.0240**	**0.0240**		**0.0240**	**0.0240**		**379.2528**	**379.2528**	**7.2700e-003**	**6.9500e-003**	**381.5609**

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

	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	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602
Unmitigated	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0592					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	0.2373	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406		13.3739	13.3739	0.0136		13.6602
Total	**2.5993**	**0.0881**	**7.5306**	**3.9000e-004**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**13.3739**	**13.3739**	**0.0136**	**0.0000**	**13.6602**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0592					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	0.2373	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406		13.3739	13.3739	0.0136		13.6602
Total	**2.5993**	**0.0881**	**7.5306**	**3.9000e-004**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**13.3739**	**13.3739**	**0.0136**	**0.0000**	**13.6602**

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

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

Colorado Mixed Use Project

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	18.00	1000sqft	0.00	18,000.00	0
Fast Food Restaurant w/o Drive Thru	1.00	1000sqft	0.00	1,000.00	0
Apartments Mid Rise	90.00	Dwelling Unit	0.99	85,000.00	255

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2016
Utility Company	Glendale Water & Power				
CO2 Intensity (lb/MWhr)	1115.33	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proejct specific parameters from EIR

Construction Phase - Actual construction period per project - 18 months

Demolition -

Grading - Project site size

Vehicle Trips - Fast Food traffic rate (which is actually a onsite coffee shop) has been adjusted to account for 701 existing trips onsite.

Woodstoves - Project does not contain fireplaces or woodstoves

Water And Wastewater - Water usage from EIR water supply section - outdoor use for entire project is contained under residential uses.

Solid Waste - Solid waste generation from EIR.

Construction Off-road Equipment Mitigation - Construction requirement for 2014

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Required per City Ordinance

Water Mitigation -

Waste Mitigation - Per City of Glendale Ordinance

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	2.00	120.00
tblConstructionPhase	PhaseEndDate	4/29/2016	2/4/2016
tblConstructionPhase	PhaseStartDate	2/6/2016	11/13/2015
tblConstructionPhase	PhaseStartDate	3/21/2015	3/23/2015
tblConstructionPhase	PhaseStartDate	10/4/2014	10/6/2014
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	76.50	0.00
tblFireplaces	NumberNoFireplace	9.00	0.00
tblFireplaces	NumberWood	4.50	0.00
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	90,000.00	85,000.00
tblLandUse	LotAcreage	0.41	0.00
tblLandUse	LotAcreage	0.02	0.00
tblLandUse	LotAcreage	2.37	0.99
tblLandUse	Population	257.00	255.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	41.40	65.70
tblSolidWaste	SolidWasteGenerationRate	11.52	0.90
tblSolidWaste	SolidWasteGenerationRate	194.40	19.70
tblVehicleTrips	ST_TR	696.00	181.00
tblVehicleTrips	SU_TR	500.00	181.00
tblVehicleTrips	WD_TR	716.00	181.00

tblWater	IndoorWaterUseRate	5,863,862.31	3,723,000.00
tblWater	IndoorWaterUseRate	303,533.71	54,750.00
tblWater	IndoorWaterUseRate	2,258,649.68	1,642,000.00
tblWater	OutdoorWaterUseRate	3,696,782.76	54,993.00
tblWater	OutdoorWaterUseRate	19,374.49	0.00
tblWater	OutdoorWaterUseRate	430,218.99	0.00
tblWoodstoves	NumberCatalytic	4.50	0.00
tblWoodstoves	NumberNoncatalytic	4.50	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					
2014	2.8073	32.8545	22.8008	0.0558	2.5997	1.3296	3.9293	0.8928	1.2575	2.1502	0.0000	5,691.1604	5,691.1604	0.2959	0.0000	5,697.3736
2015	20.7955	29.8157	21.5384	0.0558	2.7517	1.2510	3.9380	0.9301	1.1685	2.0525	0.0000	5,629.6808	5,629.6808	0.4510	0.0000	5,639.1526
2016	20.6327	17.6448	16.9159	0.0292	1.0314	1.1628	2.1942	0.2751	1.0855	1.3606	0.0000	2,754.4801	2,754.4801	0.4426	0.0000	2,763.7741
Total	**44.2355**	**80.3149**	**61.2551**	**0.1408**	**6.3827**	**3.7434**	**10.0615**	**2.0979**	**3.5115**	**5.5634**	**0.0000**	**14,075.3212**	**14,075.3212**	**1.1895**	**0.0000**	**14,100.3003**

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					
2014	1.5804	26.3430	21.9045	0.0558	2.0932	0.8015	2.8947	0.6356	0.7694	1.4050	0.0000	5,691.1604	5,691.1604	0.2959	0.0000	5,697.3736
2015	19.2724	23.8555	20.6809	0.0558	2.2452	0.7139	2.9590	0.6729	0.6889	1.3618	0.0000	5,629.6808	5,629.6808	0.4510	0.0000	5,639.1526
2016	19.2199	9.0237	16.5815	0.0292	1.0314	0.5059	1.5372	0.2751	0.5037	0.7788	0.0000	2,754.4801	2,754.4801	0.4426	0.0000	2,763.7741
Total	**40.0727**	**59.2222**	**59.1668**	**0.1408**	**5.3697**	**2.0212**	**7.3909**	**1.5836**	**1.9621**	**3.5456**	**0.0000**	**14,075.3212**	**14,075.3212**	**1.1895**	**0.0000**	**14,100.3003**

	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	9.41	26.26	3.41	0.00	15.87	46.01	26.54	24.52	44.13	36.27	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	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602
Energy	0.0391	0.3409	0.1929	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.3001	426.3001	8.1700e-003	7.8200e-003	428.8944
Mobile	5.3302	14.0835	58.5545	0.1341	8.9409	0.2017	9.1426	2.3888	0.1854	2.5742		11,775.9518	11,775.9518	0.4697		11,785.8151
Total	**7.9685**	**14.5125**	**66.2780**	**0.1366**	**8.9409**	**0.2693**	**9.2102**	**2.3888**	**0.2531**	**2.6418**	**0.0000**	**12,215.6258**	**12,215.6258**	**0.4915**	**7.8200e-003**	**12,228.3698**

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	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602
Energy	0.0348	0.3034	0.1730	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.2528	379.2528	7.2700e-003	6.9500e-003	381.5609
Mobile	5.0157	11.8893	50.2804	0.1100	7.2857	0.1665	7.4522	1.9465	0.1531	2.0997		9,658.7421	9,658.7421	0.3911		9,666.9556
Total	**7.6497**	**12.2809**	**57.9840**	**0.1123**	**7.2857**	**0.2312**	**7.5169**	**1.9465**	**0.2178**	**2.1643**	**0.0000**	**10,051.3688**	**10,051.3688**	**0.4120**	**6.9500e-003**	**10,062.1767**

	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	4.00	15.38	12.51	17.80	18.51	14.16	18.39	18.51	13.95	18.08	0.00	17.72	17.72	16.17	11.13	17.71

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2014	10/3/2014	5	25	
2	Grading	Grading	10/6/2014	3/20/2015	5	120	
3	Building Construction	Building Construction	3/23/2015	2/5/2016	5	230	
4	Architectural Coating	Architectural Coating	11/13/2015	2/4/2016	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 172,125; Residential Outdoor: 57,375; Non-Residential Indoor: 28,500; Non-Residential Outdoor: 9,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2014

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					0.5441	0.0000	0.5441	0.0824	0.0000	0.0824			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.5441**	**0.9304**	**1.4745**	**0.0824**	**0.8904**	**0.9727**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0556	0.8928	0.5785	1.8600e-003	0.0439	0.0175	0.0614	0.0120	0.0161	0.0281		191.6285	191.6285	1.6300e-003		191.6628
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**0.1071**	**0.9573**	**1.3745**	**3.2800e-003**	**0.1557**	**0.0186**	**0.1742**	**0.0417**	**0.0171**	**0.0587**		**318.9080**	**318.9080**	**8.8700e-003**		**319.0944**

3.2 Demolition - 2014

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					0.2016	0.0000	0.2016	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.2016**	**0.4023**	**0.6039**	**0.0321**	**0.4023**	**0.4345**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0556	0.8928	0.5785	1.8600e-003	0.0439	0.0175	0.0614	0.0120	0.0161	0.0281		191.6285	191.6285	1.6300e-003		191.6628
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**0.1071**	**0.9573**	**1.3745**	**3.2800e-003**	**0.1557**	**0.0186**	**0.1742**	**0.0417**	**0.0171**	**0.0587**		**318.9080**	**318.9080**	**8.8700e-003**		**319.0944**

3.3 Grading - 2014

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					0.8046	0.0000	0.8046	0.4216	0.0000	0.4216			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.8046**	**0.9304**	**1.7350**	**0.4216**	**0.8904**	**1.3120**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.2628	20.2978	13.1521	0.0424	1.6833	0.3981	2.0814	0.4415	0.3662	0.8077		4,356.6341	4,356.6341	0.0371		4,357.4139
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**1.3144**	**20.3623**	**13.9480**	**0.0438**	**1.7951**	**0.3992**	**2.1943**	**0.4711**	**0.3671**	**0.8383**		**4,483.9135**	**4,483.9135**	**0.0444**		**4,484.8455**

3.3 Grading - 2014

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					0.2981	0.0000	0.2981	0.1644	0.0000	0.1644			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.2981**	**0.4023**	**0.7004**	**0.1644**	**0.4023**	**0.5668**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.2628	20.2978	13.1521	0.0424	1.6833	0.3981	2.0814	0.4415	0.3662	0.8077		4,356.6341	4,356.6341	0.0371		4,357.4139
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**1.3144**	**20.3623**	**13.9480**	**0.0438**	**1.7951**	**0.3992**	**2.1943**	**0.4711**	**0.3671**	**0.8383**		**4,483.9135**	**4,483.9135**	**0.0444**		**4,484.8455**

3.3 Grading - 2015

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					0.8046	0.0000	0.8046	0.4216	0.0000	0.4216			0.0000			0.0000
Off-Road	1.4120	11.9409	8.8138	0.0120		0.8748	0.8748		0.8359	0.8359		1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**1.4120**	**11.9409**	**8.8138**	**0.0120**	**0.8046**	**0.8748**	**1.6794**	**0.4216**	**0.8359**	**1.2575**		**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.1101	17.8169	12.0066	0.0423	1.8353	0.3106	2.1458	0.4788	0.2857	0.7645		4,305.8523	4,305.8523	0.0337		4,306.5603
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	0.0463	0.0579	0.7179	1.4200e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		123.1899	123.1899	6.6300e-003		123.3292
Total	**1.1564**	**17.8748**	**12.7245**	**0.0437**	**1.9471**	**0.3115**	**2.2586**	**0.5084**	**0.2866**	**0.7950**		**4,429.0422**	**4,429.0422**	**0.0403**		**4,429.8895**

3.3 Grading - 2015

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					0.2981	0.0000	0.2981	0.1644	0.0000	0.1644			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0120		0.4023	0.4023		0.4023	0.4023	0.0000	1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**0.2661**	**5.9808**	**7.9564**	**0.0120**	**0.2981**	**0.4023**	**0.7004**	**0.1644**	**0.4023**	**0.5668**	**0.0000**	**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.1101	17.8169	12.0066	0.0423	1.8353	0.3106	2.1458	0.4788	0.2857	0.7645		4,305.8523	4,305.8523	0.0337		4,306.5603
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	0.0463	0.0579	0.7179	1.4200e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		123.1899	123.1899	6.6300e-003		123.3292
Total	**1.1564**	**17.8748**	**12.7245**	**0.0437**	**1.9471**	**0.3115**	**2.2586**	**0.5084**	**0.2866**	**0.7950**		**4,429.0422**	**4,429.0422**	**0.0403**		**4,429.8895**

3.4 Building Construction - 2015

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	1.4538	14.3777	8.2983	0.0113		0.9995	0.9995		0.9195	0.9195		1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**1.4538**	**14.3777**	**8.2983**	**0.0113**		**0.9995**	**0.9995**		**0.9195**	**0.9195**		**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1225	1.2712	1.4069	2.8300e-003	0.0812	0.0222	0.1035	0.0231	0.0204	0.0436		286.5944	286.5944	2.2400e-003		286.6414
Worker	0.3286	0.4111	5.0974	0.0101	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		874.6481	874.6481	0.0471		875.6370
Total	**0.4511**	**1.6823**	**6.5042**	**0.0129**	**0.8748**	**0.0292**	**0.9041**	**0.2336**	**0.0268**	**0.2604**		**1,161.2425**	**1,161.2425**	**0.0493**		**1,162.2785**

3.4 Building Construction - 2015

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1225	1.2712	1.4069	2.8300e-003	0.0812	0.0222	0.1035	0.0231	0.0204	0.0436		286.5944	286.5944	2.2400e-003		286.6414
Worker	0.3286	0.4111	5.0974	0.0101	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		874.6481	874.6481	0.0471		875.6370
Total	**0.4511**	**1.6823**	**6.5042**	**0.0129**	**0.8748**	**0.0292**	**0.9041**	**0.2336**	**0.0268**	**0.2604**		**1,161.2425**	**1,161.2425**	**0.0493**		**1,162.2785**

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	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646		1,178.554 9	1,178.554 9	0.3555		1,186.020 2
Total	**1.3816**	**13.7058**	**8.2122**	**0.0113**		**0.9398**	**0.9398**		**0.8646**	**0.8646**		**1,178.554 9**	**1,178.554 9**	**0.3555**		**1,186.020 2**

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	0.1082	1.1228	1.2947	2.8300e-003	0.0813	0.0185	0.0997	0.0231	0.0170	0.0401		283.4376	283.4376	2.0200e-003		283.4801
Worker	0.2966	0.3708	4.6151	0.0101	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		844.5154	844.5154	0.0433		845.4254
Total	**0.4049**	**1.4936**	**5.9098**	**0.0129**	**0.8749**	**0.0251**	**0.9000**	**0.2336**	**0.0231**	**0.2567**		**1,127.953 0**	**1,127.953 0**	**0.0454**		**1,128.905 4**

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

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	0.1082	1.1228	1.2947	2.8300e-003	0.0813	0.0185	0.0997	0.0231	0.0170	0.0401		283.4376	283.4376	2.0200e-003		283.4801
Worker	0.2966	0.3708	4.6151	0.0101	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		844.5154	844.5154	0.0433		845.4254
Total	**0.4049**	**1.4936**	**5.9098**	**0.0129**	**0.8749**	**0.0251**	**0.9000**	**0.2336**	**0.0231**	**0.2567**		**1,127.9530**	**1,127.9530**	**0.0454**		**1,128.9054**

3.5 Architectural Coating - 2015

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	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177
Total	**18.8259**	**2.5703**	**1.9018**	**2.9700e-003**		**0.2209**	**0.2209**		**0.2209**	**0.2209**		**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0648	0.0811	1.0051	1.9800e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		172.4658	172.4658	9.2900e-003		172.6608
Total	**0.0648**	**0.0811**	**1.0051**	**1.9800e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**172.4658**	**172.4658**	**9.2900e-003**		**172.6608**

3.5 Architectural Coating - 2015

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	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0367		282.2177
Total	**18.4787**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0648	0.0811	1.0051	1.9800e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		172.4658	172.4658	9.2900e-003		172.6608
Total	**0.0648**	**0.0811**	**1.0051**	**1.9800e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**172.4658**	**172.4658**	**9.2900e-003**		**172.6608**

3.5 Architectural Coating - 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					
Archit. Coating	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**18.7878**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0585	0.0731	0.9100	1.9800e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		166.5242	166.5242	8.5400e-003		166.7036
Total	**0.0585**	**0.0731**	**0.9100**	**1.9800e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**166.5242**	**166.5242**	**8.5400e-003**		**166.7036**

3.5 Architectural Coating - 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					
Archit. Coating	18.4193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**18.4787**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0585	0.0731	0.9100	1.9800e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		166.5242	166.5242	8.5400e-003		166.7036
Total	**0.0585**	**0.0731**	**0.9100**	**1.9800e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**166.5242**	**166.5242**	**8.5400e-003**		**166.7036**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

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	5.0157	11.8893	50.2804	0.1100	7.2857	0.1665	7.4522	1.9465	0.1531	2.0997		9,658.7421	9,658.7421	0.3911		9,666.9556
Unmitigated	5.3302	14.0835	58.5545	0.1341	8.9409	0.2017	9.1426	2.3888	0.1854	2.5742		11,775.9518	11,775.9518	0.4697		11,785.8151

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	593.10	644.40	546.30	2,028,910	1,653,300
Fast Food Restaurant w/o Drive Thru	181.00	181.00	181.00	327,799	267,114
Medical Office Building	650.34	161.28	27.90	1,275,022	1,038,979
Total	1,424.44	986.68	755.20	3,631,731	2,959,392

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	0.0348	0.3034	0.1730	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.2528	379.2528	7.2700e-003	6.9500e-003	381.5609
NaturalGas Unmitigated	0.0391	0.3409	0.1929	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.3001	426.3001	8.1700e-003	7.8200e-003	428.8944

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					
Fast Food Restaurant w/o Drive Thru	638.384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Medical Office Building	539.014	5.8100e-003	0.0528	0.0444	3.2000e-004		4.0200e-003	4.0200e-003		4.0200e-003	4.0200e-003		63.4134	63.4134	1.2200e-003	1.1600e-003	63.7993
Apartments Mid Rise	2446.15	0.0264	0.2254	0.0959	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7827	287.7827	5.5200e-003	5.2800e-003	289.5341
Total		**0.0391**	**0.3409**	**0.1929**	**2.1400e-003**		**0.0270**	**0.0270**		**0.0270**	**0.0270**		**426.3001**	**426.3001**	**8.1800e-003**	**7.8200e-003**	**428.8944**

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					
Fast Food Restaurant w/o Drive Thru	0.619796	6.6800e-003	0.0608	0.0510	3.6000e-004		4.6200e-003	4.6200e-003		4.6200e-003	4.6200e-003		72.9172	72.9172	1.4000e-003	1.3400e-003	73.3609
Medical Office Building	0.461047	4.9700e-003	0.0452	0.0380	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2408	54.2408	1.0400e-003	9.9000e-004	54.5709
Apartments Mid Rise	2.14281	0.0231	0.1975	0.0840	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.0949	252.0949	4.8300e-003	4.6200e-003	253.6291
Total		**0.0348**	**0.3034**	**0.1730**	**1.8900e-003**		**0.0240**	**0.0240**		**0.0240**	**0.0240**		**379.2528**	**379.2528**	**7.2700e-003**	**6.9500e-003**	**381.5609**

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

	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	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602
Unmitigated	2.5993	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406	0.0000	13.3739	13.3739	0.0136	0.0000	13.6602

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0592					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	0.2373	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406		13.3739	13.3739	0.0136		13.6602
Total	**2.5993**	**0.0881**	**7.5306**	**3.9000e-004**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**13.3739**	**13.3739**	**0.0136**	**0.0000**	**13.6602**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0592					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	0.2373	0.0881	7.5306	3.9000e-004		0.0406	0.0406		0.0406	0.0406		13.3739	13.3739	0.0136		13.6602
Total	**2.5993**	**0.0881**	**7.5306**	**3.9000e-004**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**13.3739**	**13.3739**	**0.0136**	**0.0000**	**13.6602**

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

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

APPENDIX 4.4

Noise Calculations

Table N-1
NOISE LEVEL CONTOURS - Existing

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1)	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	13,448	35	50	0	0	1.8%	0.7%	64.6
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,277	25	35	0	0	1.8%	0.7%	53.3
Oak St btwn Pacific Ave and Kenilworth	2	0	655	25	45	0	0	1.8%	0.7%	49.2
Kenilworth Ave btwn W Colorado and Harvard	2	0	792	25	25	0	0	1.8%	0.7%	52.7
Pacific Ave north of Colorado St	4	10	7,189	35	50	0	0	1.8%	0.7%	62.3

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-2
NOISE LEVEL CONTOURS - Existing + Project

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	 Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	13,524	35	50	0	0	1.8%	0.7%	**64.6**
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,333	25	35	0	0	1.8%	0.7%	**53.4**
Oak St btwn Pacific Ave and Kenilworth	2	0	852	25	45	0	0	1.8%	0.7%	**50.4**
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,045	25	25	0	0	1.8%	0.7%	**53.9**
Pacific Ave north of Colorado St	4	10	7,200	35	50	0	0	1.8%	0.7%	**62.3**

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-2
NOISE LEVEL CONTOURS - Existing + Project

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1	Barrier Attn. dB(A)	Vehicle Mix		dB(A) CNEL
								Medium Trucks	Heavy Trucks	
W Colorado Street west of Pacific Ave	4	12	13,524	35	50	0	0	1.8%	0.7%	**64.6**
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,530	25	35	0	0	1.8%	0.7%	**54.0**
Oak St btwn Pacific Ave and Kenilworth	2	0	655	25	45	0	0	1.8%	0.7%	**49.2**
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,045	25	25	0	0	1.8%	0.7%	**53.9**
Pacific Ave north of Colorado St	4	10	7,200	35	50	0	0	1.8%	0.7%	**62.3**

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-2
NOISE LEVEL CONTOURS - Existing + Project

				Design	Dist. from		Barrier	Vehicle Mix		
ROADWAY NAME		Median	ADT	Speed	Center to	Alpha	Attn.	Medium	Heavy	dB(A)
Segment	Lanes	Width	Volume	(mph)	Receptor	Factor (1	dB(A)	Trucks	Trucks	CNEL
W Colorado Street west of Pacific Ave	4	12	13,524	35	50	0	0	1.8%	0.7%	**64.6**
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,277	25	35	0	0	1.8%	0.7%	**53.3**
Oak St btwn Pacific Ave and Kenilworth	2	0	908	25	45	0	0	1.8%	0.7%	**50.7**
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,045	25	25	0	0	1.8%	0.7%	**53.9**
Pacific Ave north of Colorado St	4	10	7,200	35	50	0	0	1.8%	0.7%	**62.3**

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-3
NOISE LEVEL CONTOURS - Cumulative A

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1)	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	16,995	35	50	0	0	1.8%	0.7%	65.5
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,302	25	35	0	0	1.8%	0.7%	53.3
Oak St btwn Pacific Ave and Kenilworth	2	0	668	25	45	0	0	1.8%	0.7%	49.3
Kenilworth Ave btwn W Colorado and Harvard	2	0	808	25	25	0	0	1.8%	0.7%	52.8
Pacific Ave north of Colorado St	4	10	7,612	35	50	0	0	1.8%	0.7%	62.5

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-3
NOISE LEVEL CONTOURS - Cumulative B

				Design	Dist. from		Barrier	Vehicle Mix		
ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Center to Receptor	Alpha Factor (1	Attn. dB(A)	Medium Trucks	Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	16,995	35	50	0	0	1.8%	0.7%	65.5
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,302	25	35	0	0	1.8%	0.7%	53.3
Oak St btwn Pacific Ave and Kenilworth	2	0	668	25	45	0	0	1.8%	0.7%	49.3
Kenilworth Ave btwn W Colorado and Harvard	2	0	808	25	25	0	0	1.8%	0.7%	52.8
Pacific Ave north of Colorado St	4	10	7,612	35	50	0	0	1.8%	0.7%	62.5

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-3
NOISE LEVEL CONTOURS - Cumulative C

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	16,995	35	50	0	0	1.8%	0.7%	65.5
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,302	25	35	0	0	1.8%	0.7%	53.3
Oak St btwn Pacific Ave and Kenilworth	2	0	668	25	45	0	0	1.8%	0.7%	49.3
Kenilworth Ave btwn W Colorado and Harvard	2	0	808	25	25	0	0	1.8%	0.7%	52.8
Pacific Ave north of Colorado St	4	10	7,612	35	50	0	0	1.8%	0.7%	62.5

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-4
NOISE LEVEL CONTOURS - Cumulative

								Vehicle Mix		
ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1	Barrier Attn. dB(A)	Medium Trucks	Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	17,072	35	50	0	0	1.8%	0.7%	**65.5**
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,358	25	35	0	0	1.8%	0.7%	**53.5**
Oak St btwn Pacific Ave and Kenilworth	2	0	865	25	45	0	0	1.8%	0.7%	**50.5**
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,061	25	25	0	0	1.8%	0.7%	**54.0**
Pacific Ave north of Colorado St	4	10	7,623	35	50	0	0	1.8%	0.7%	**62.5**

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-4
NOISE LEVEL CONTOURS - Cumulative

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	17,072	35	50	0	0	1.8%	0.7%	**65.5**
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,555	25	35	0	0	1.8%	0.7%	**54.1**
Oak St btwn Pacific Ave and Kenilworth	2	0	668	25	45	0	0	1.8%	0.7%	**49.3**
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,061	25	25	0	0	1.8%	0.7%	**54.0**
Pacific Ave north of Colorado St	4	10	7,623	35	50	0	0	1.8%	0.7%	**62.5**

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-4
NOISE LEVEL CONTOURS - Cumulative

				Design	Dist. from		Barrier	Vehicle Mix		
ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Center to Receptor	Alpha Factor (1	Attn. dB(A)	Medium Trucks	Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	17,072	35	50	0	0	1.8%	0.7%	**65.5**
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,302	25	35	0	0	1.8%	0.7%	**53.3**
Oak St btwn Pacific Ave and Kenilworth	2	0	921	25	45	0	0	1.8%	0.7%	**50.7**
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,061	25	25	0	0	1.8%	0.7%	**54.0**
Pacific Ave north of Colorado St	4	10	7,623	35	50	0	0	1.8%	0.7%	**62.5**

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

APPENDIX 4.8

Traffic Study

KOA CORPORATION
PLANNING & ENGINEERING

TECHNICAL MEMORANDUM

To: Greg Tan
CMGT Construction Company

From: Bruce Chow

Cc: Brian Marchetti, AICP

Date: November 19, 2013

Subject: Updated Traffic Impact Analysis –
Mixed-Use Development at 507-525 W. Colorado Street, Glendale
KOA Project JB21113-002

EXECUTIVE SUMMARY

A traffic impact study was conducted for the proposed mixed-use project located at 507-525 West Colorado Street in the City of Glendale. The proposed project includes the development of 90 apartment units, 18,000 square feet of medical office use, and 1,000 square feet of delicatessen use. The proposed Project is anticipated to be completed by the year 2015. Two study intersections were selected for evaluation based on consultation with City of Glendale staff. The future conditions traffic analysis was conducted for the year 2015. The Project would have a weekday trip generation totaling 1,126 net new daily trips, 11 net new a.m. peak hour trips, and 23 net new p.m. peak hour trips.

The proposed Project is not expected to create a significant traffic impact at the two study intersections under the analyzed existing with-Project and future with-Project conditions.

The proposed Project under the project access alternative is not expected to create a significant traffic impact at the two study intersections and three street segments under the analyzed existing with-Project and future with-Project conditions.

PROJECT DESCRIPTION

The proposed Project involves removing 8,704 square feet of child care use and 5,115 square feet of office use, and the construction of three new buildings, to provide 90 apartment units, 18,000 square feet of medical office use, and 1,000 square feet of delicatessen use. For the purpose of this analysis, it is assumed that the Project would be completed by the year 2015. The project site plan is provided on Figure 1.

The Project site is located on Colorado Street, west of Pacific Avenue. Figure 2 illustrates the location of the Project site.

As determined during consultation with City of Glendale staff, the following two intersections were analyzed for potential project impacts:

1. Kenilworth Avenue-Colorado Street Freeway extension and Colorado Street
2. Pacific Avenue and Colorado Street

For analysis of level of service (LOS) at signalized intersections, the City of Glendale has designated the Intersection Capacity Utilization (ICU) methodology as the desired tool. The concept of roadway level of service under the ICU methodology is calculated as the volume of vehicles at the critical movements that pass through the facility divided by the capacity of that facility. A 10 percent adjustment to the clearance and loss time factor based on the critical phases of the signalized control was included in the traffic analysis. A facility is "at capacity" (ICU value of 1.00 or greater) when extreme congestion occurs. This value is a function of hourly volumes and approach lane configurations on each leg of the intersection.

LOS values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating "capacity" of a roadway. The table shown below defines the level of service criteria.

Level of Service Definitions

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

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 212, 1982

All figures are referenced in this report are provided in Attachment A.

EXISTING CONDITIONS

Existing Street System

Colorado Street is an east-west major arterial that borders the project site on the south. In the study area, this roadway provides two travel lanes in each direction and a two-way left turn center lane. On-street parking is prohibited on the north side of the roadway and allowed on the south side in front of the ICIS building.

Pacific Avenue is a north-south minor arterial that is located east of the project site. In the study area, this roadway provides two travel lanes in each direction north of Colorado Street and one travel lane in each direction south of Colorado Street. On-street parking is provided on both sides of the roadway.

Existing Transit Services

The Project study area is served by public bus transit lines operated by the City of Glendale and Metro. Table 1 provides a description of the public transit lines that operate within the study area.

Table 1 - Existing Transit Service Summary

Agency	Line	From	To	Via	Approx. Peak Frequency
Glendale Beeline	GB5	Pacific Community Center & Park	Hoover High School	Pacific Avenue, Colorado Street	15 to 26 minutes
Glendale Beeline	GB6	Pacific Community Center & Park	Glendale High School	Pacific Avenue, Colorado Street	16 to 32 minutes
Metro	183	Sherman Oaks	Glendale	Pacific Avenue, Colorado Street	30 to 60 minutes
Metro	201	Canoga Park	Studio City	Pacific Avenue	50 minutes
Metro Shuttle	603	Tarzana	Northridge	Pacific Avenue, Colorado Street	10 to 15 minutes

Existing Level of Service

KOA compiled manual intersection counts for the two study intersections, conducted on Tuesday, April 30, 2013, during the 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. peak periods. The intersection traffic count summary sheets are included in Attachment B.

In addition, traffic counts were conducted on a weekday for a 24-hour period to estimate the average daily traffic (ADT) along the residential study street segments. The intersection and street segment counts were collected on Tuesday, April 30, 2013. The ADT traffic count worksheets are provided in Attachment B of this report.

The results of the counts were utilized to determine existing a.m. and p.m. peak-hour traffic conditions. The existing levels of service were calculated based on the traffic counts and intersection geometrics. Figure 3 illustrates the existing study intersection approach geometries. Table 2 indicates that the study intersections are currently operating at LOS C or better during both the a.m. and p.m. peak hours.

Table 2 - Intersection Performance – Existing Conditions

No.	Study Intersection	AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	0.471	A	0.553	A
2	Pacific Ave. & Colorado St.	0.748	C	0.799	C

The existing intersection turn volumes are provided on Figure 4. The existing level of service calculation worksheets are provided in Attachment C.

PROJECT TRAFFIC

Project Trip Generation

The Project trip generation estimates were based on trip rates defined by the Institute of Transportation Engineers (ITE) *Trip Generation (9th Edition)*. Trip rates for the Apartment, Medical Office, and Fast-food Restaurant without Drive-Through use categories were utilized to calculate the trip generation for the proposed Project uses.

An internal trip capture reduction was applied to the proposed project uses. Internal trip capture is based on the premise that some of the employees, residents, and guests on the site, as well as adjacent commercial parcels would use the project uses, thereby reducing some of the trips that the proposed project would otherwise generate.

A 10 percent pass-by trip reduction was applied for the proposed delicatessen use and medical office. These are trips that are an intermediate stop at the project site during an existing or previously-planned trip. These intermediate stops may be for a planned purpose (such as a visit to the delicatessen use on the way to or from work), or they may be spur-of-the-moment “impulse” trips. While these trips are new to the site itself, they are not new to the roadway system and are excluded to ensure that double counting of these trips does not occur.

Trip credits for the existing child care center and office were included in the trip generation.

Table 3 summarizes the trip generation rates and resulting Project trip generation. As shown by this table, the Project would have a weekday trip generation totaling 1,126 net new daily trips, 11 net new a.m. peak hour trips, and 23 net new p.m. peak hour trips. The Site-Adjacent trip generation was used for the two study intersection. The Area Study trip generation was used to determine the extent of the study area.

Project Trip Distribution and Assignment

Trip distribution is the process of assigning the directions from which traffic will access a project site. Trip distribution is dependent upon the land use characteristics of the project, the local roadway network, and the general locations of other land uses to which project trips would likely originate or terminate. The trip distribution pattern, which was reviewed and approved by the City, is summarized below and shown on Figure 5.

- North – 35%
- East – 20%
- South – 40%
- West – 5%

Based on the trip generation and distribution assumptions described above, the Project traffic was assigned to the roadway system based on the proposed driveway location and the roadways that would likely be used to access the regional highway system. The Project trip assignment is illustrated on Figure 6 for the a.m. and p.m. peak hours.

Table 3 - Project Trip Generation Summary

Land Use	Intensity	Unit	Weekday						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
TRIP GENERATION RATES [1]									
Apartment (Land Use 220)	-	DU	6.65	20%	80%	0.51	65%	35%	0.62
Medical Office (Land Use 720)	-	KSF	36.13	79%	21%	2.39	28%	72%	3.57
Fast-Food Restaurant without Drive-Through (Land Use	-	KSF	716.00	60%	40%	43.87	51%	49%	26.15
Day Care Center (Land Use 565)	-	KSF	74.06	53%	47%	12.18	47%	53%	12.34
General Office (Land Use 710)	-	KSF	11.03	88%	12%	1.56	17%	83%	1.49
FORECAST TRIP GENERATION									
Proposed Land Uses									
Apartment	90	DU	599	9	37	46	36	20	56
Medical Office	18.000	KSF	650	34	9	43	18	46	64
Delicatessen	1.000	KSF	716	26	18	44	13	13	26
Trip Generation (Proposed Land Uses)			1,965	69	64	133	67	79	146
Internal Trip Reduction									
Apartment			*(69)*	*(1)*	*(3)*	*(4)*	*(2)*	*(2)*	*(4)*
Medical Office (5%)			*(33)*	*(2)*	*0*	*(2)*	*(1)*	*(2)*	*(3)*
Delicatessen (5%)			*(36)*	*(1)*	*(1)*	*(2)*	*(1)*	*0*	*(1)*
Total Internal Trip Reduction			*(138)*	*(4)*	*(4)*	*(8)*	*(4)*	*(4)*	*(8)*
Project Trip Generation (Site-Adjacent Intersections)			1,827	65	60	125	63	75	138
Pass-by Trip Reduction (10%)									
Delicatessen			*(68)*	*(3)*	*(1)*	*(4)*	*(1)*	*(2)*	*(3)*
Total Pass-by Trip Reduction			*(68)*	*(3)*	*(1)*	*(4)*	*(1)*	*(2)*	*(3)*
Project Trip Generation (Area Study Intersections)			1,759	62	59	121	62	73	135
Existing Land Uses (To Be Removed)									
Child Care Center	8.704	KSF	645	56	50	106	50	57	107
Office	5.115	KSF	56	7	1	8	1	7	8
Existing Trip Generation (Site-Adjacent Intersections)			701	63	51	114	51	64	115
Pass-by Trip Reduction (10%)									
Child Care Center			*(65)*	*(6)*	*(5)*	*(11)*	*(5)*	*(6)*	*(11)*
Existing Trip Generation (Area Study Intersections)			636	57	46	103	46	58	104
Net Trip Generation (Site-Adjacent)			1,126	2	9	11	12	11	23
Net Trip Generation (Area Study Intersections)			1,123	5	13	18	16	15	31

Note: DU = Dwelling Units; KSF = 1,000s of square feet

[1] Source: Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition.*

EXISTING WITH-PROJECT CONDITIONS

This section documents existing traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for the existing with-Project conditions were determined by adding the net Project trips to the existing traffic volumes. The existing with-Project level of service analysis results are summarized in Table 4.

Table 4 - Intersection Performance – Existing With-Project

No.	Study Intersection	AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	0.473	A	0.555	A
2	Pacific Ave. & Colorado St.	0.749	C	0.802	D

Figure 7 illustrates the existing with-Project traffic volumes at the study intersections for the a.m. and p.m. peak-hour conditions. The existing with-Project level of service calculation worksheets are provided in Attachment D.

FUTURE WITHOUT-PROJECT CONDITIONS (YEAR 2015)

The following section summarizes future without-Project traffic conditions at the two study intersections. The year 2015 was selected for analysis based on the anticipated 2015 opening date of the proposed Project.

Per the City's traffic study guidelines, the future traffic forecasts include an ambient growth rate of 1.0% per year for a total of 2.0% which was applied to the existing peak hour counts. The rate is consistent with the general traffic growth in the study area and was approved by City of Glendale staff. City staff provided a list of area projects that was included in the future without-Project analysis.

Trip generation estimates for the area projects identified within the City of Glendale are provided in Attachment E. Area project traffic was distributed to the surrounding street system in the study area for the a.m. and p.m. peak hours and are provided in Attachment E.

Based on the forecast parameters, the future without-Project conditions level of service analysis was conducted for the two study intersections, as summarized in Table 5.

Table 5 - Intersection Performance – Future Without-Project

No.	Study Intersection	AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	0.573	A	0.654	B
2	Pacific Ave. & Colorado St.	0.848	D	0.903	E

The future without-Project traffic volumes are provided on Figure 8. The future without-Project conditions level of service worksheets are provided in Attachment F.

FUTURE WITH-PROJECT CONDITIONS (YEAR 2015)

The Project trips provided on Figure 6 were added to the future without-Project traffic forecasts to estimate future with-Project traffic volumes. Figure 9 provides the future with Project traffic volumes. The future with-Project level of service analysis results are also summarized in Table 6.

Table 6 - Intersection Performance – Future With-Project

No.	Study Intersection	AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	0.575	A	0.657	B
2	Pacific Ave. & Colorado St.	0.849	D	0.905	E

The future with-Project level of service calculation worksheets are provided in Attachment G.

PROJECT IMPACTS

Traffic impacts are identified if the proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below the poorest acceptable level of service and project traffic will cause a further decline below a certain threshold.

The City of Glendale has established specific thresholds for project related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered "significant" impacts:

Level of Service	Final V/C Ratio*	Project Related V/C Increase
D, E or F	Greater than 0.800	Equal to or greater than 0.020

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

Project Traffic Impacts - Existing With-Project Conditions

Table 7 provides a comparison of existing and existing with-Project conditions during the a.m. and p.m. peak-hours. Traffic impacts created by the Project are calculated by comparing existing conditions to existing with-Project conditions. The overall traffic impacts created by the proposed Project, and determinations of significant impact, are provided in the two right-most columns of the table.

Table 7 – Determination of Project Impacts – Existing With-Project Conditions

No.	Study Intersection	Peak Hour	Existing		Existing Plus Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.471	A	0.473	A	0.002	NO
		PM	0.553	A	0.555	A	0.002	NO
2	Pacific Ave. & Colorado St.	AM	0.748	C	0.749	C	0.001	NO
		PM	0.799	C	0.802	D	0.003	NO

Based on the results of the analysis as summarized in Table 7 and the established significant threshold criteria, the proposed Project is not expected to create a significant traffic impact at the two study intersections during existing with-Project conditions.

Project Traffic Impacts - Future With-Project Conditions

Table 8 provides a comparison of future without-Project and future with-Project conditions during the a.m. and p.m. peak-hours. Traffic impacts created by the Project are calculated by comparing future without-Project conditions to future with-Project conditions. The overall traffic impacts created by the proposed Project, and determinations of significant impact, are provided in the two right columns of the table.

Table 8 – Determination of Project Impacts – Existing With-Project Conditions

No.	Study Intersection	Peak Hour	Future Without Project		Future With Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.573	A	0.575	A	0.002	NO
		PM	0.654	B	0.657	B	0.003	NO
2	Pacific Ave. & Colorado St.	AM	0.848	D	0.849	D	0.001	NO
		PM	0.903	E	0.905	E	0.002	NO

Based on the results of the analysis as summarized in Table 8 and the established significant threshold criteria, the proposed Project is not expected to create a significant traffic impact at the two study intersections during future with-Project conditions.

PROJECT ACCESS ALTERNATIVE ANALYSIS

Vehicular access to the on-site parking will be provided from one driveway on Colorado Street. The driveway at Colorado Street is unsignalized and provides full access to the site for ingress and egress movements.

An analysis for a project access alternative was requested by the City to determine the effects of prohibiting left-turn egress movements from the proposed project driveway on Colorado Street. Additional intersection and street segment analyses were conducted for this alternative scenario.

The Project trip distribution pattern, with left-turn egress movements prohibited at the project driveway, is summarized below and shown on Figure 10. The Project trip assignment, with left-turn egress movements prohibited at the project driveway, is illustrated on Figure 11 for the a.m. and p.m. peak hours.

STREET SEGMENT ANALYSIS

This section summarizes the project access alternative (left-turn egress prohibited) impacts to the neighborhood street segments.

Three residential street segments were included in this study for the project access alternative analysis. The study street segments were selected during consultation with City of Glendale staff and are listed below. These street segments were selected for analysis as they are located in close proximity to project site and could potentially be impacted by Project traffic if the project left-turn egress movements to Colorado Street are prohibited. The three street segments are as follows:

A. Kenilworth Avenue between Harvard Street and Colorado Street
B. Harvard Street between Kenilworth Avenue and Pacific Avenue
C. Oak Street between Kenilworth Avenue and Pacific Avenue

Three scenarios were included in the street segment analysis to determine the significance of impacts to the neighborhood streets. The three scenarios for the street segment analysis are as follows:

- Scenario A:
  Kenilworth Avenue – 45% of outbound project traffic;
  Harvard Street – 10% of outbound project traffic;
  Oak Street – 35% of outbound project traffic;

- Scenario B:
  Kenilworth Avenue – 45% of outbound project traffic;
  Harvard Street – 45% of outbound project traffic;
  Oak Street – 0% of outbound project traffic;

- Scenario C:
  Kenilworth Avenue – 45% of outbound project traffic;
  Harvard Street – 0% of outbound project traffic;
  Oak Street – 45% of outbound project traffic;

Determination of Traffic Impacts on Residential Street Segments

The City of Glendale Circulation Element contains the following “residential” street classifications: Local; Neighborhood Collector; Community Collector; and Urban Collector. With very few exceptions, all are two-lane facilities. The Circulation Element assigns an “environmental” capacity of 2,500 Average Daily Traffic (ADT) to a Local; 5,000 ADT to a Neighborhood Collector; and 10,000 ADT to both a Community and Urban collector. Two scenarios apply:

- If the addition of Project ADT to a residential” street does not cause the street’s “environmental” capacity to be exceeded (regardless of how great an increase), no Project-generated impact occurs.

- If the street's "environmental" capacity is exceeded with or without the Project, no Project-generated impact occurs if the Project increases the without-Project ADT by less than 10 percent.

Table 9 summarizes the existing, project, existing with-Project, future without-Project and future with-Project traffic volumes on the study street segments for all three scenarios.

Table 9 – Determination of Project Impacts – Street Segments

SCENARIO A *

STREET SEGMENT	STREET CLASSIFICATION	DAILY CAPACITY	DIRECTION	DAILY TRAFFIC VOLUME					
						EXISTING PLUS PROJECT	FUTURE (2015)		
				EXISTING	PROJECT ONLY		WITHOUT PROJECT	WITH PROJECT	Significant Project Impact
Kenilworth Ave. between			NB	476	253	729	486	739	
Harvard St. and Colorado St.	Local	2,500	SB	316	0	316	322	322	NO
			Total	792	253	1,045	808	1,061	
Harvard St. between			EB	771	56	827	786	842	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	506	0	506	516	516	NO
			Total	1,277	56	1,333	1,302	1,358	
Oak St. between			EB	350	197	547	357	554	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	305	0	305	311	311	NO
			Total	655	197	852	668	865	

* Project outbound trips to northbound Pacific Ave. via Harvard St., and to eastbound Colorado St. and southbound Pacific Ave. via Oak St.

SCENARIO B *

STREET SEGMENT	STREET CLASSIFICATION	DAILY CAPACITY	DIRECTION	DAILY TRAFFIC VOLUME					
						EXISTING PLUS PROJECT	FUTURE (2015)		
				EXISTING	PROJECT ONLY		WITHOUT PROJECT	WITH PROJECT	Significant Project Impact
Kenilworth Ave. between			NB	476	253	729	486	739	
Harvard St. and Colorado St.	Local	2,500	SB	316	0	316	322	322	NO
			Total	792	253	1,045	808	1,061	
Harvard St. between			EB	771	253	1,024	786	1,039	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	506	0	506	516	516	NO
			Total	1,277	253	1,530	1,302	1,555	
Oak St. between			EB	350	0	350	357	357	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	305	0	305	311	311	NO
			Total	655	0	655	668	668	

* Project outbound trips to northbound Pacific Ave., eastbound Colorado St. and southbound Pacific Ave. via Harvard St.

SCENARIO C *

STREET SEGMENT	STREET CLASSIFICATION	DAILY CAPACITY	DIRECTION	DAILY TRAFFIC VOLUME					
						EXISTING PLUS PROJECT	FUTURE (2015)		
				EXISTING	PROJECT ONLY		WITHOUT PROJECT	WITH PROJECT	Significant Project Impact
Kenilworth Ave. between			NB	476	253	729	486	739	
Harvard St. and Colorado St.	Local	2,500	SB	316	0	316	322	322	NO
			Total	792	253	1,045	808	1,061	
Harvard St. between			EB	771	0	771	786	786	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	506	0	506	516	516	NO
			Total	1,277	0	1,277	1,302	1,302	
Oak St. between			EB	350	253	603	357	610	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	305	0	305	311	311	NO
			Total	655	253	908	668	921	

* Project outbound trips to northbound Pacific Ave., eastbound Colorado St. and southbound Pacific Ave. via Oak St.

As shown in Table 9, the proposed Project, with egress left-turn movements prohibited, would not create significant traffic impacts for the three scenarios at the three study street segments.

Project Access Alternative Traffic Impacts - Existing With-Project Conditions

Table 10 provides a comparison of existing and existing with-Project (left-turn egress prohibited) conditions during the a.m. and p.m. peak-hours. Traffic impacts created by the Project are calculated by comparing existing conditions to existing with-Project conditions. The overall traffic impacts created by the proposed Project, and determinations of significant impact, are provided in the two right-most columns of the table.

Table 10 – Determination of Project Impacts – Existing With-Project Conditions

No.	Study Intersection	Peak Hour	Existing		Existing Plus Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.471	A	0.473	A	0.002	NO
		PM	0.553	A	0.555	A	0.002	NO
2	Pacific Ave. & Colorado St.	AM	0.748	C	0.748	C	0.000	NO
		PM	0.799	C	0.802	D	0.003	NO

Based on the results of the analysis as summarized in Table 10 and the established significant threshold criteria, the proposed Project is not expected to create a significant traffic impact at the two study intersections during the existing with-Project conditions scenario.

Figure 12 illustrates the existing with-Project (left-turn egress prohibited) traffic volumes at the study intersections for the a.m. and p.m. peak-hour conditions. The existing with-Project (left-turn egress prohibited) level of service calculation worksheets are provided in Attachment H.

Project Access Alternative Traffic Impacts - Future With-Project Conditions

Table 11 provides a comparison of future without-Project and future with-Project (left-turn egress prohibited) conditions during the a.m. and p.m. peak-hours. Traffic impacts created by the Project are calculated by comparing future without-Project conditions to future with-Project conditions. The overall traffic impacts created by the proposed Project, and determinations of significant impact, are provided in the two right columns of the table.

Table 11 – Determination of Project Impacts – Future With-Project Conditions

No.	Study Intersection	Peak Hour	Future Without Project		Future With Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.573	A	0.575	A	0.002	NO
		PM	0.654	B	0.657	B	0.003	NO
2	Pacific Ave. & Colorado St.	AM	0.848	D	0.848	D	0.000	NO
		PM	0.903	E	0.905	E	0.002	NO

Based on the results of the analysis as summarized in Table 11 and the established significant threshold criteria, the proposed Project is not expected to create a significant traffic impact at the two study intersections during the future with-Project conditions scenario.

Figure 13 illustrates the future with-Project (left-turn egress prohibited) traffic volumes at the study intersections for the a.m. and p.m. peak-hour conditions. The future with-Project (left-turn egress prohibited) level of service calculation worksheets are provided in Attachment I.

CONGESTION MANAGEMENT PROGRAM (CMP) ANALYSIS

This section demonstrates the ways in which this traffic study was prepared to be in conformance with the procedures mandated by the County of Los Angeles Congestion Management Program (CMP).

The CMP was created statewide because of Proposition 111 and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project will add 50 or more vehicle trips during either a.m. or p.m. weekday peak hours.
- At CMP mainline freeway-monitoring locations, where the project will add 150 or more trips, in either direction, during the either the a.m. or p.m. weekday peak hours.

The nearest CMP arterial monitoring intersection to the project site is at:

- CMP #73 Ventura Boulevard and Lankershim Boulevard (5.5 miles from project site)

Based on the trip generation and distribution of the project, it is not expected that 50 or more new project trips per hour would be added at these CMP intersections. Therefore, no further analysis of potential CMP impacts is required. In addition, the proposed project is expected to add less than 150 new trips per hour, in either direction, to any freeway segments based on the project trip generation defined in Table 4. Therefore, no further analysis of CMP freeway monitoring stations is required.

COLORADO STREET LEFT-TURN QUEUE ANALYSIS

A traffic simulation model based on the Synchro program was prepared to evaluate the queue along Colorado Street, west of Pacific Avenue during the future with-Project conditions. The existing eastbound left-turn storage lane is approximately 100 feet, with a two-way left-turn lane present beyond the back of the striped pocket for the left-turn lane. Per the conceptual site plan, the project driveway is located approximately 185 feet from the Colorado/Pacific intersections. Under the future with project conditions, the maximum 95th percentile queue length for the eastbound left-turn movement on Colorado Street west of Pacific Avenue is forecast to be approximately 121 feet during the a.m. peak hour and 201 feet during the p.m. peak hour. The 50th percentile queue length was 42 feet during the a.m. peak hour and 69 feet during the p.m. peak hour. Based on the queuing analysis, the eastbound left-turn queue during the p.m. peak hour will queue, using the 95th percentile queue, past the project driveway and prevent left-turn outbound movements at the project driveway on Colorado Street.

The future with-Project queue worksheets are provided in Attachment J.

CALTRANS ANALYSIS

This section summarizes the queuing analysis conducted on the northbound-eastbound Colorado Street Freeway Extension at Colorado Street. A traffic simulation model based on the Synchro program was prepared to evaluate the existing and future queues without and with-Project conditions.

As shown on Table 12, the maximum queue on the Colorado Street Freeway Extension is projected to be 107 feet under the future with-Project condition during the p.m. peak hour. The queue on the Colorado Street Freeway Extension, under the future without-Project condition, is projected to be 101 feet. Thus, the proposed project is projected to add six feet to the future average queue. In terms of the number of vehicles in the queue, the six-foot increase is negligible

Table 12 – Colorado Street Freeway Extension Queue Analysis

Location	Time Period	Queue Length in Feet			
		Existing	Existing Plus Project	Future Without Project	Future With Project
Colorado Street Freeway Extension	AM	0	0	0	0
at Colorado Street	PM	9	10	101	107

Location	Time Period	Queue Length in Feet			
		Existing	Existing Plus Project Alternative Access	Future Without Project	Future with Project Alternative Access
Colorado Street Freeway Extension	AM	0	0	0	0
at Colorado Street	PM	9	10	101	107

The Synchro analysis worksheets are provided in Attachment K.

Additional locations were considered for the queue analysis, such as the Pacific Avenue ramp intersections at State Route 134, but the amount of project traffic projected to use Pacific Avenue and State Route 134 was very minimal. As shown on Figure 6, there is one net new project trip during the a.m. peak hour and two net new project trips (one in each direction) during the p.m. peak hour on Pacific Avenue. The nominal addition of project traffic on Pacific Avenue and State Route 134 would not create any significant impacts to the Pacific Avenue ramp intersections or to State Route 134.

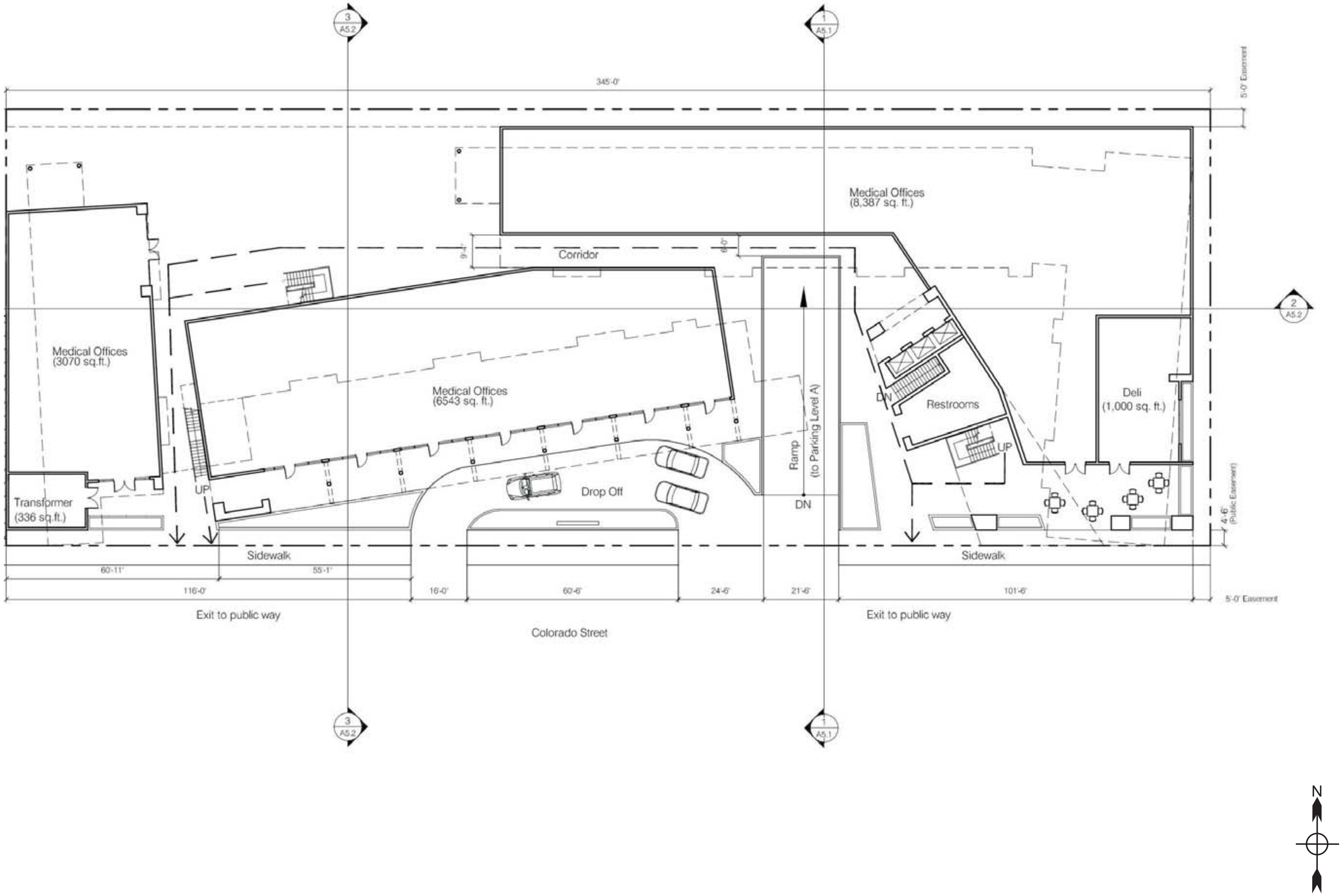
SUMMARY AND CONCLUSIONS

The proposed project includes the development of 90 apartment units, 18,000 square feet of medical office use, and 1,000 square feet of delicatessen use. The proposed Project is anticipated to be completed by the year 2015. Two study intersections were selected for evaluation based on consultation with City of Glendale staff. The future conditions traffic analysis was conducted for the year 2015. The Project would have a weekday trip generation totaling 1,126 net new daily trips, 11 net new a.m. peak hour trips, and 23 net new p.m. peak hour trips.

The proposed Project is not expected to create a significant traffic impact at the two study intersections under the existing with-Project and future with-Project conditions scenario.

The proposed Project under the project access alternative (left-turn egress prohibited) scenario is not expected to create a significant traffic impact at the two study intersections and three street segments under the existing with-Project and future with-Project conditions scenarios.

ATTACHMENT A - FIGURES



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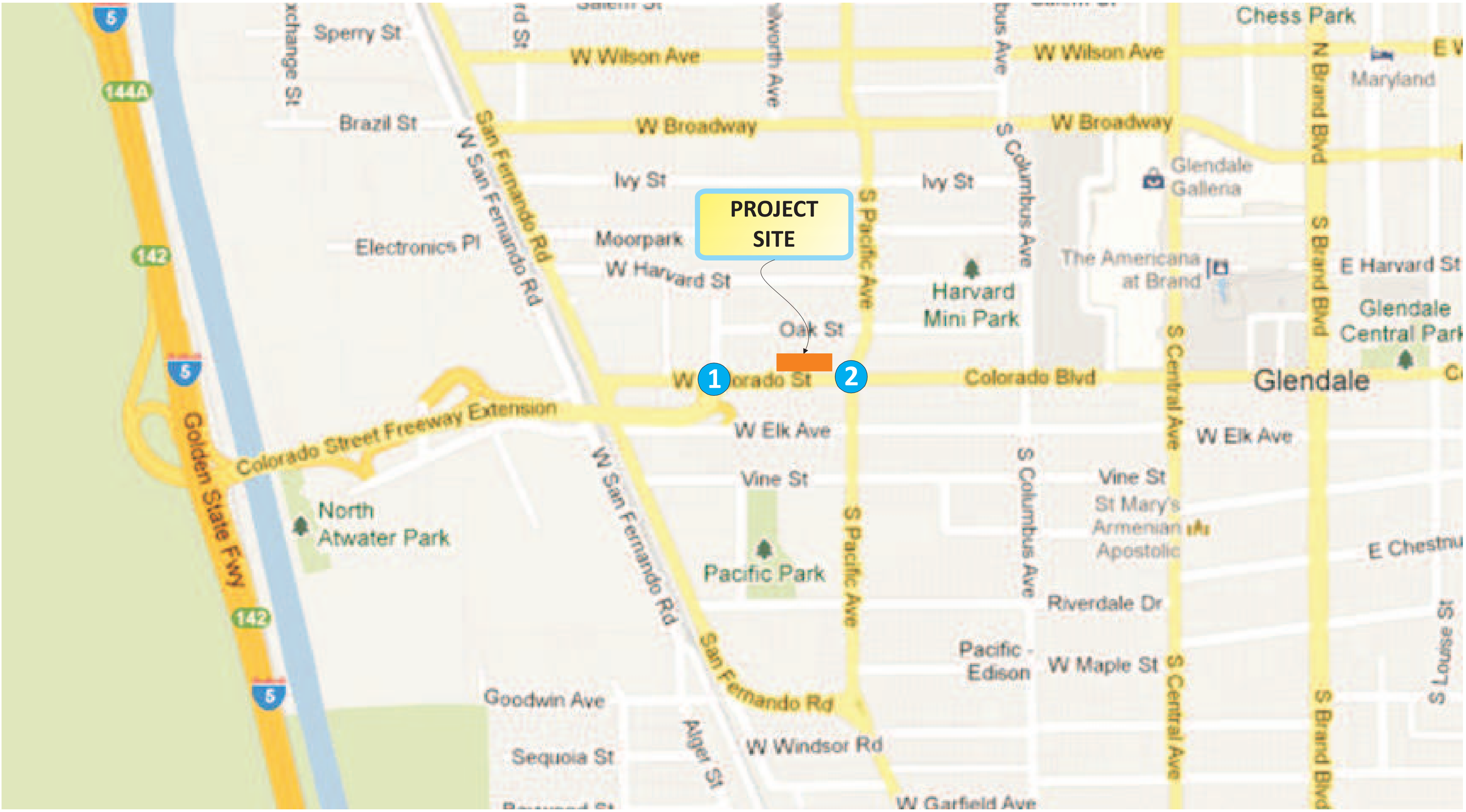
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 1

Conceptual Site Plan



Legend

🟧	Project Site Location
#	Study Intersection and Reference Number

10/01/13

N

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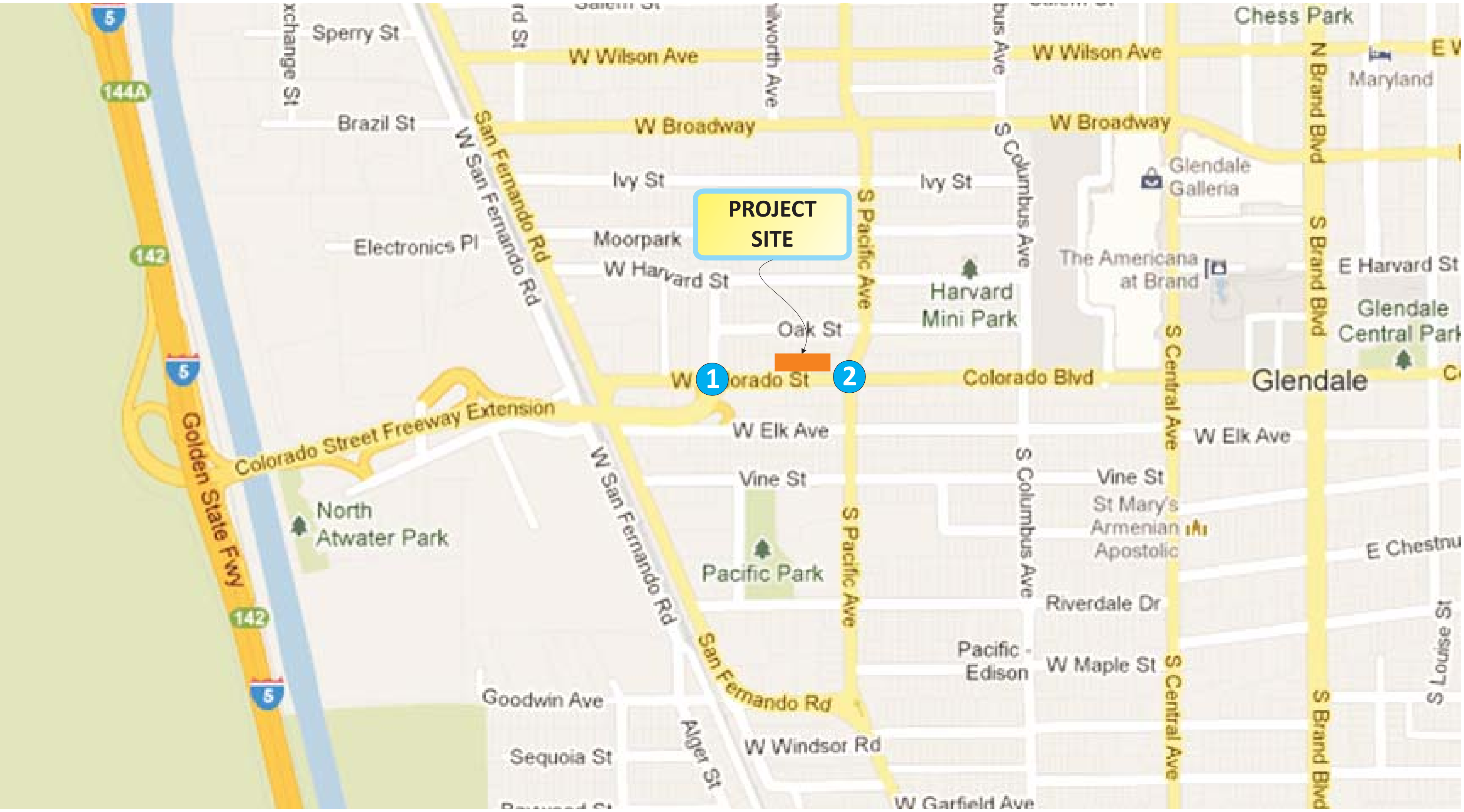
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 2

Project Study Area



Legend

🟧 Project Site Location

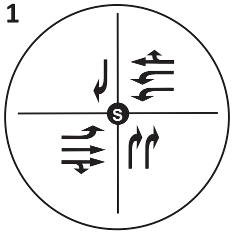
Study Intersection and Reference Number

Ⓢ Signalized Intersection

Intersection Lane Geometry

10/01/13

1



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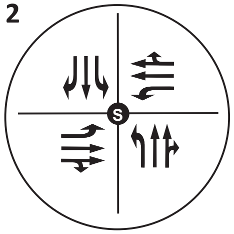

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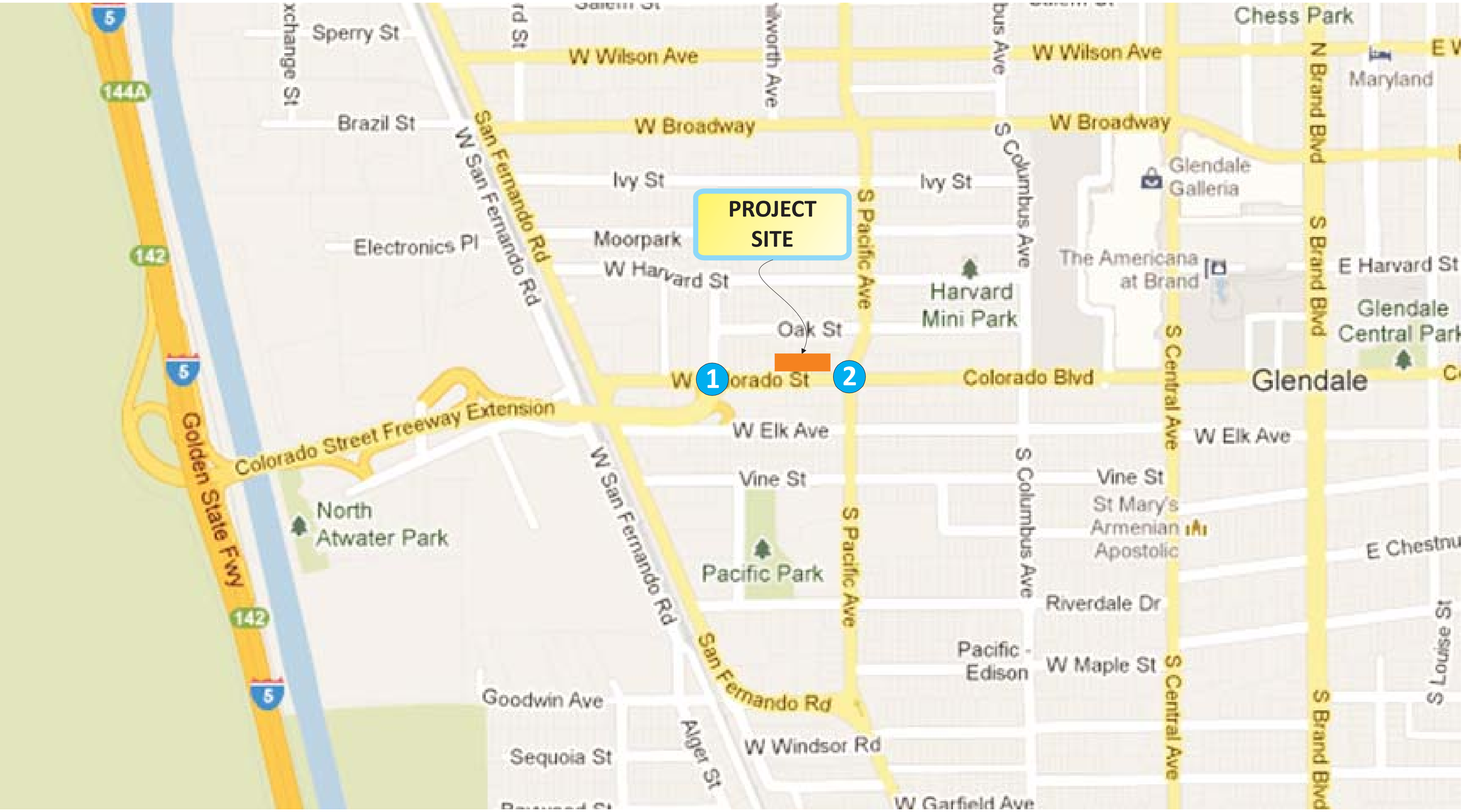
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 3

Study Intersection Geometries



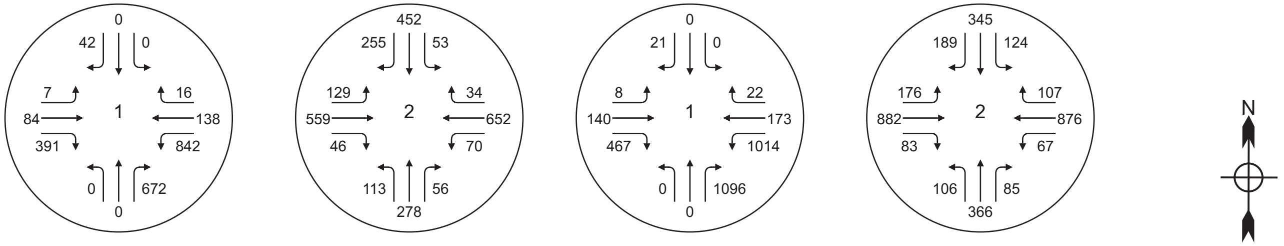
Legend

🟧	Project Site Location
#	Study Intersection and Reference Number
XXX ↴	Intersection Turn Volume

10/01/13

AM PEAK HOUR

PM PEAK HOUR



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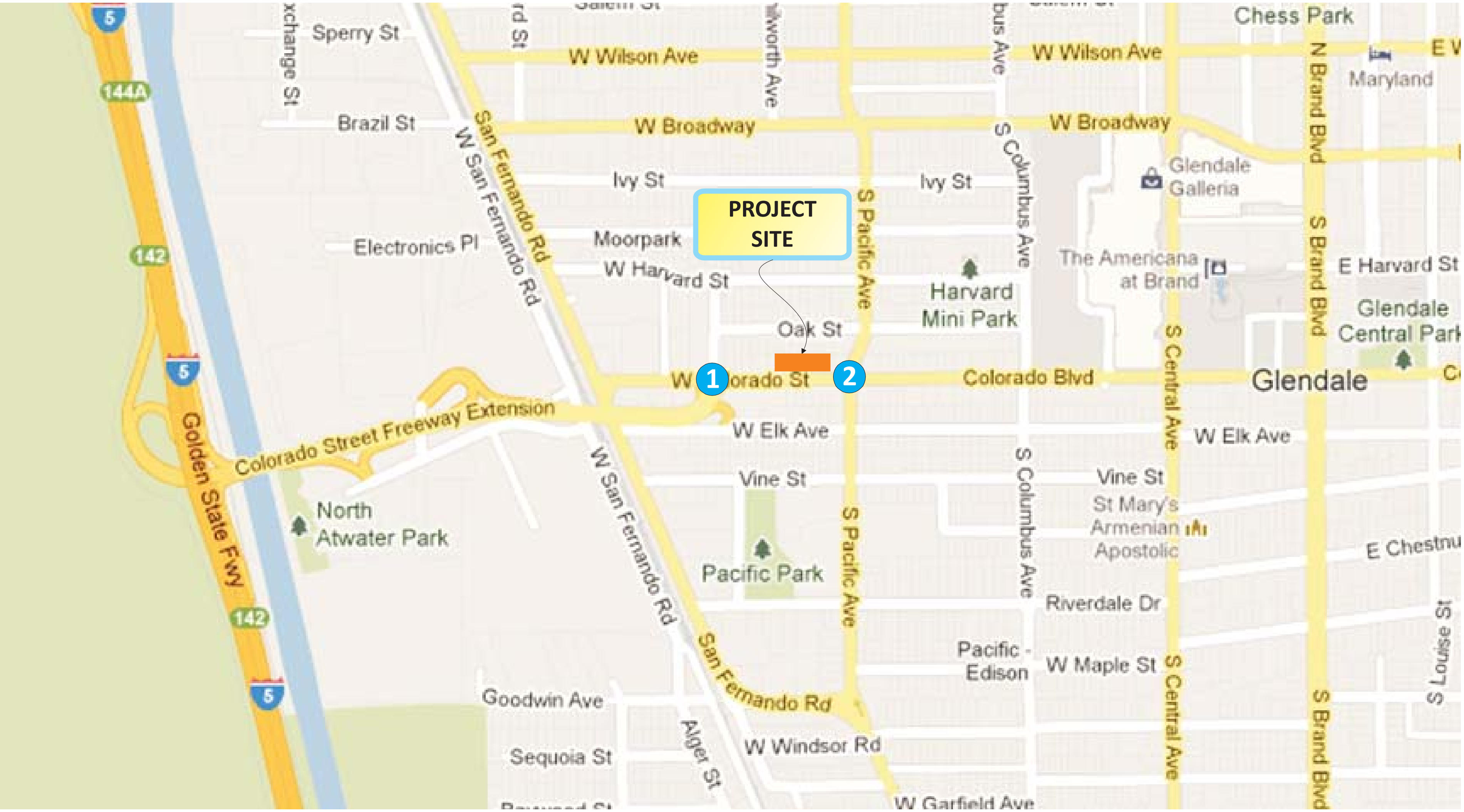
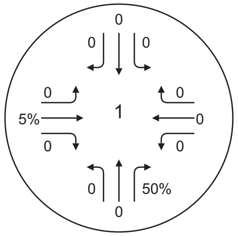
507-525 W. Colorado Street Mixed-Use Project, Glendale

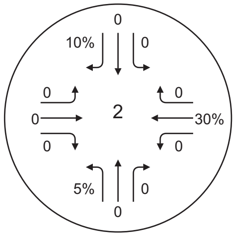
Figure 4

Existing Traffic Volumes - AM and PM Peak Hour

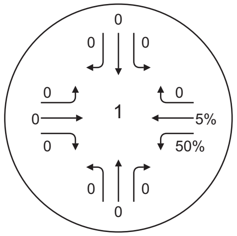


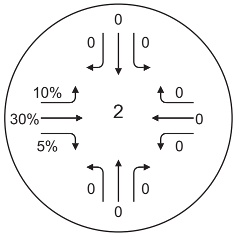
INBOUND TRIPS

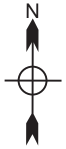




OUTBOUND TRIPS







Legend

🟧 Project Site Location

Study Intersection and Reference Number

XXX Intersection Turn Volume

10/01/13

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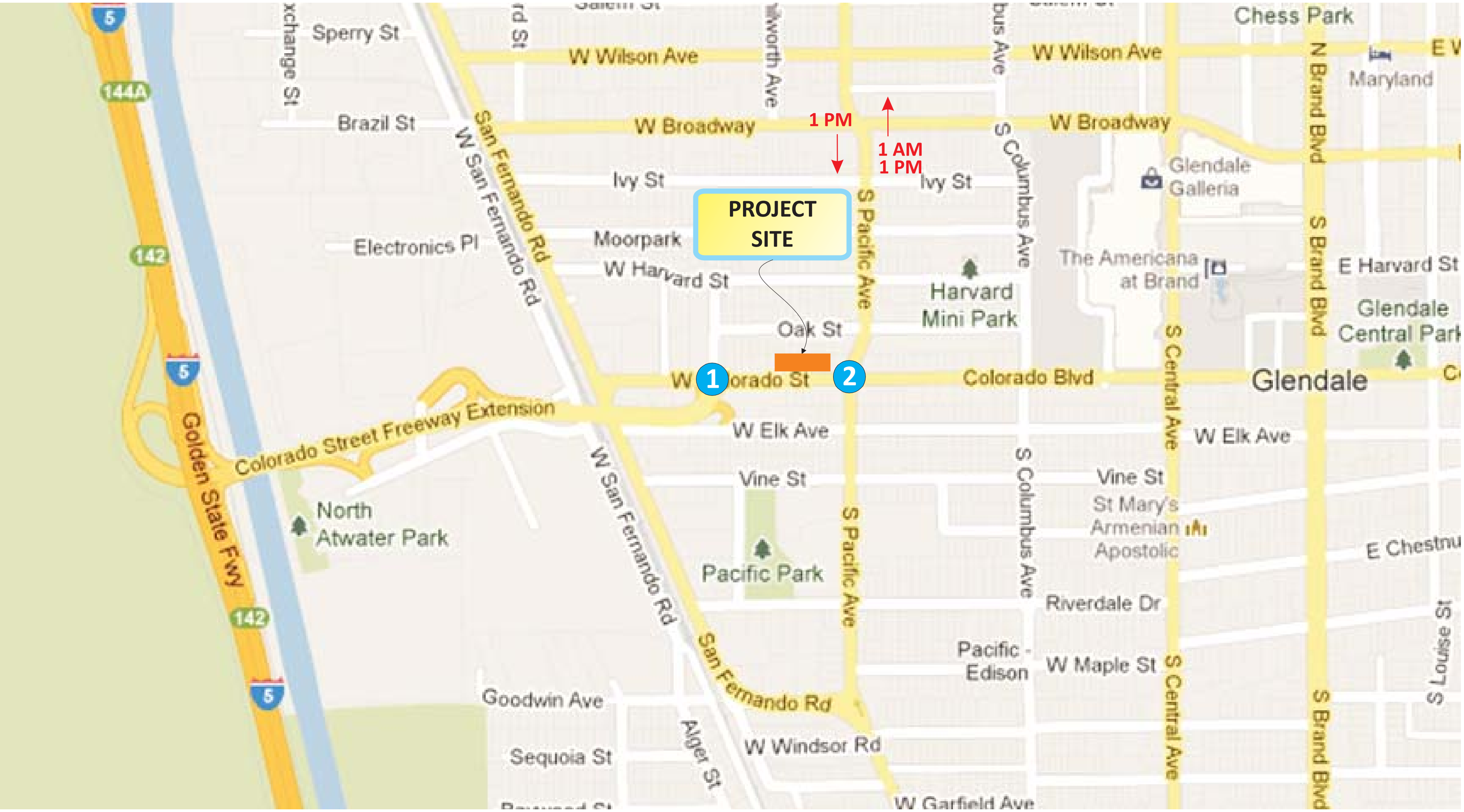
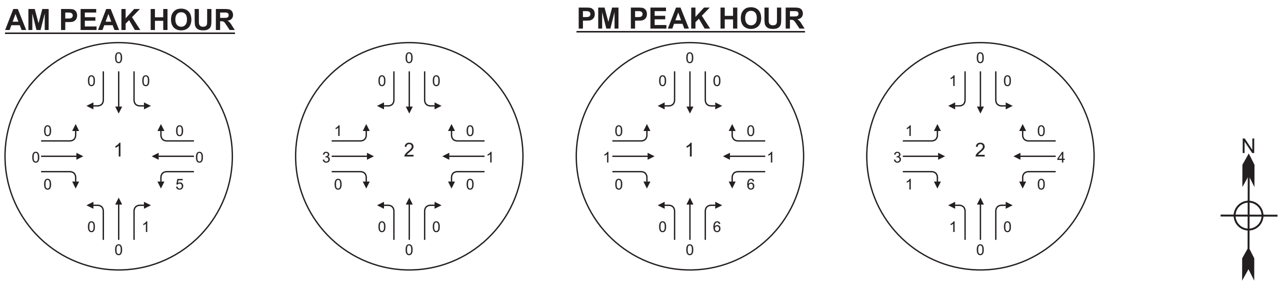
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 5

Project Trip Distribution Percentages





Legend

🟧	Project Site Location
#	Study Intersection and Reference Number
XXX ↴	Intersection Turn Volume

10/01/13

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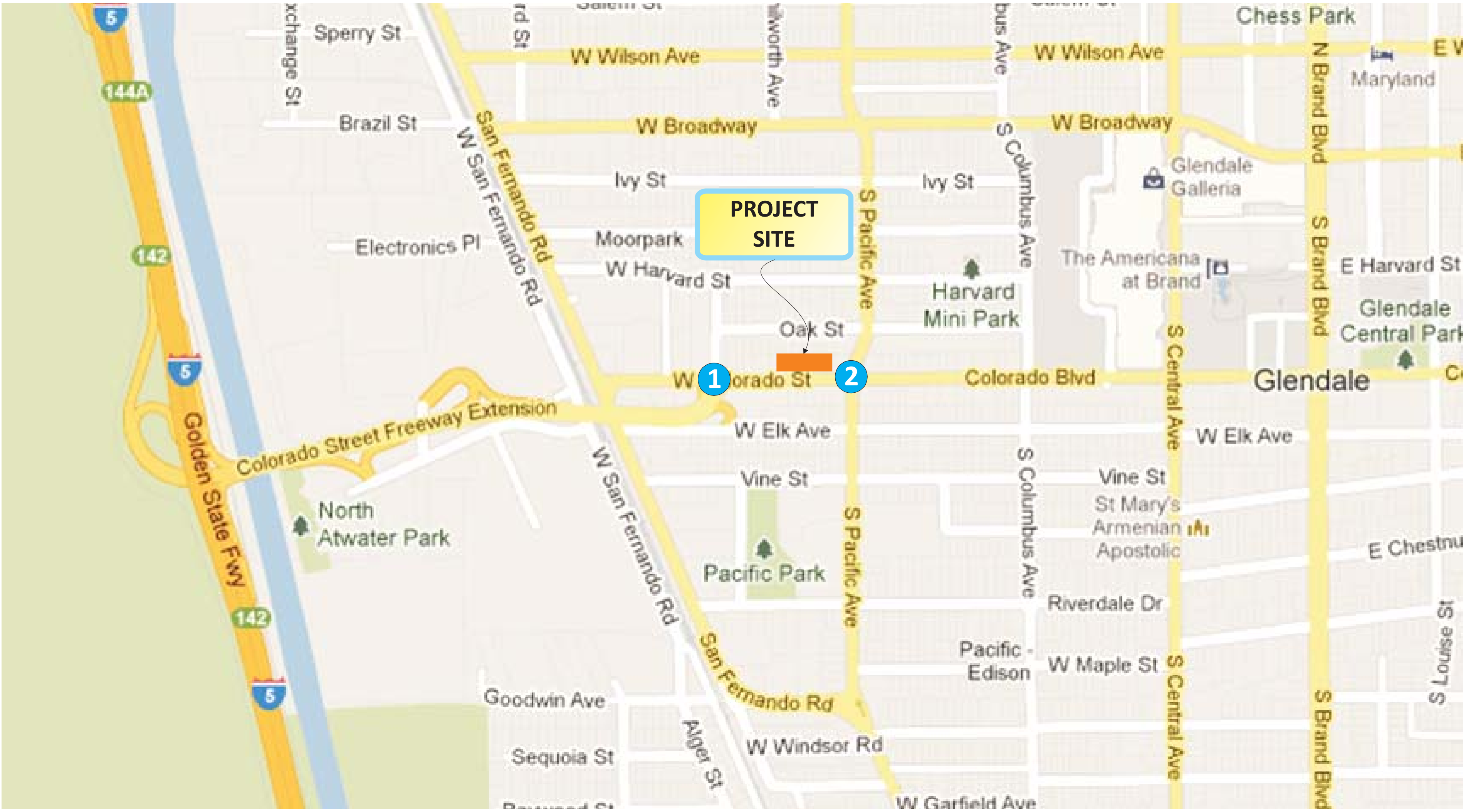
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 6

Project Traffic Volumes - AM and PM Peak Hour

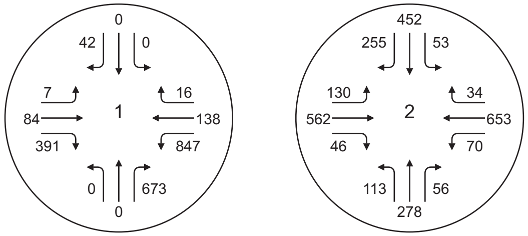


Legend

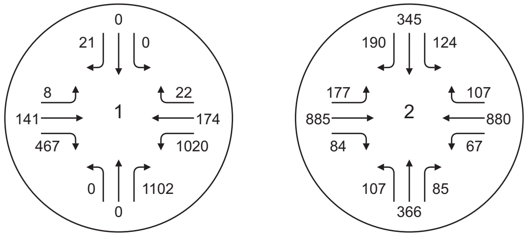
🟧	Project Site Location
#	Study Intersection and Reference Number
XXX ↴	Intersection Turn Volume

10/01/13

AM PEAK HOUR



PM PEAK HOUR



N

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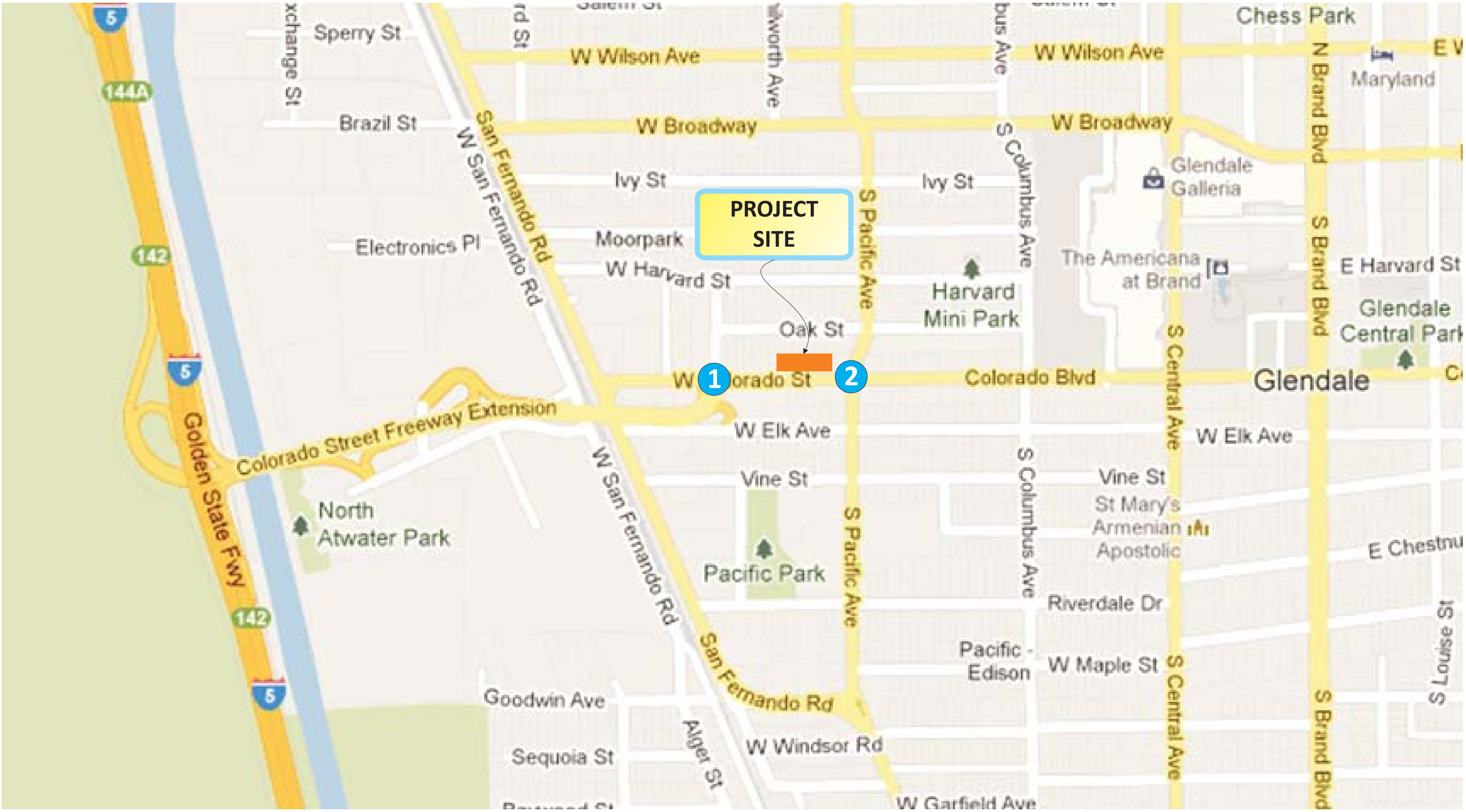
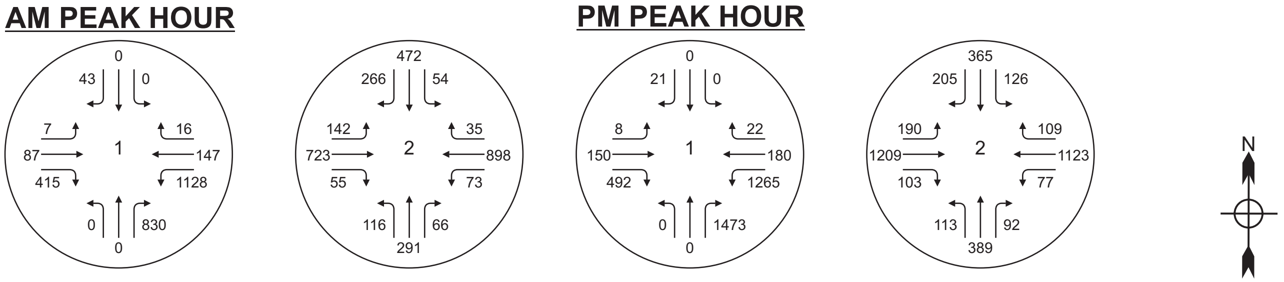
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 7

Existing with-Project Traffic Volumes - AM and PM Peak Hour





Legend

🟧	Project Site Location
#	Study Intersection and Reference Number
XXX ↲	Intersection Turn Volume

10/01/13

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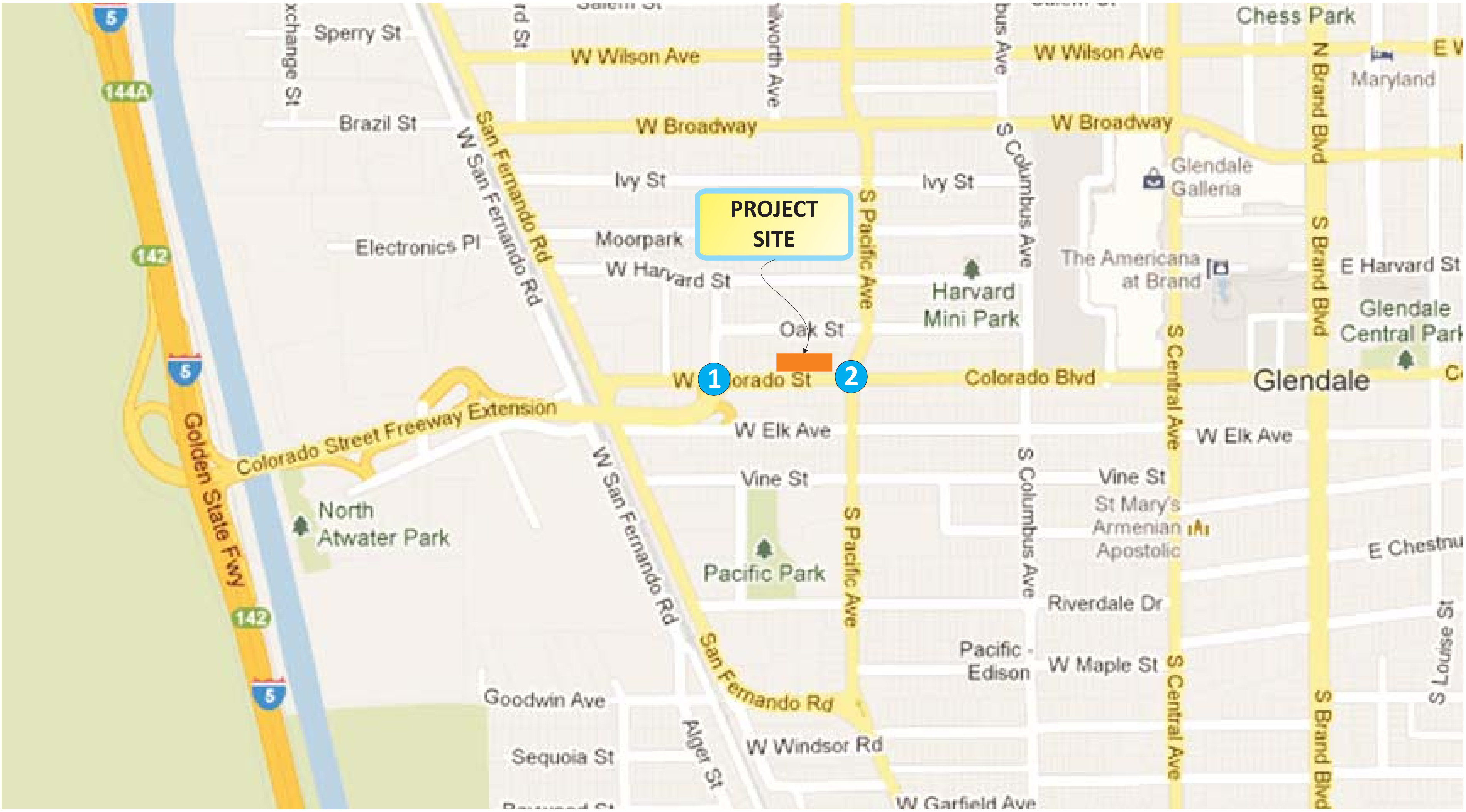
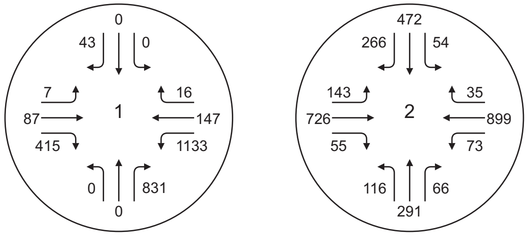
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 8

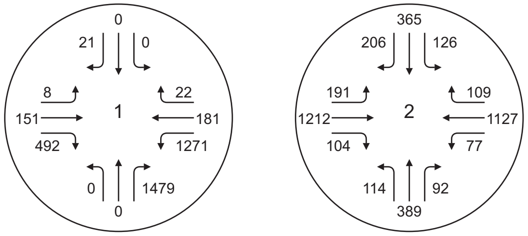
Future without Project Traffic Volumes - AM and PM Peak Hour



AM PEAK HOUR



PM PEAK HOUR



N

Legend

🟧 Project Site Location

\# Study Intersection and Reference Number

XXX Intersection Turn Volume

10/01/13

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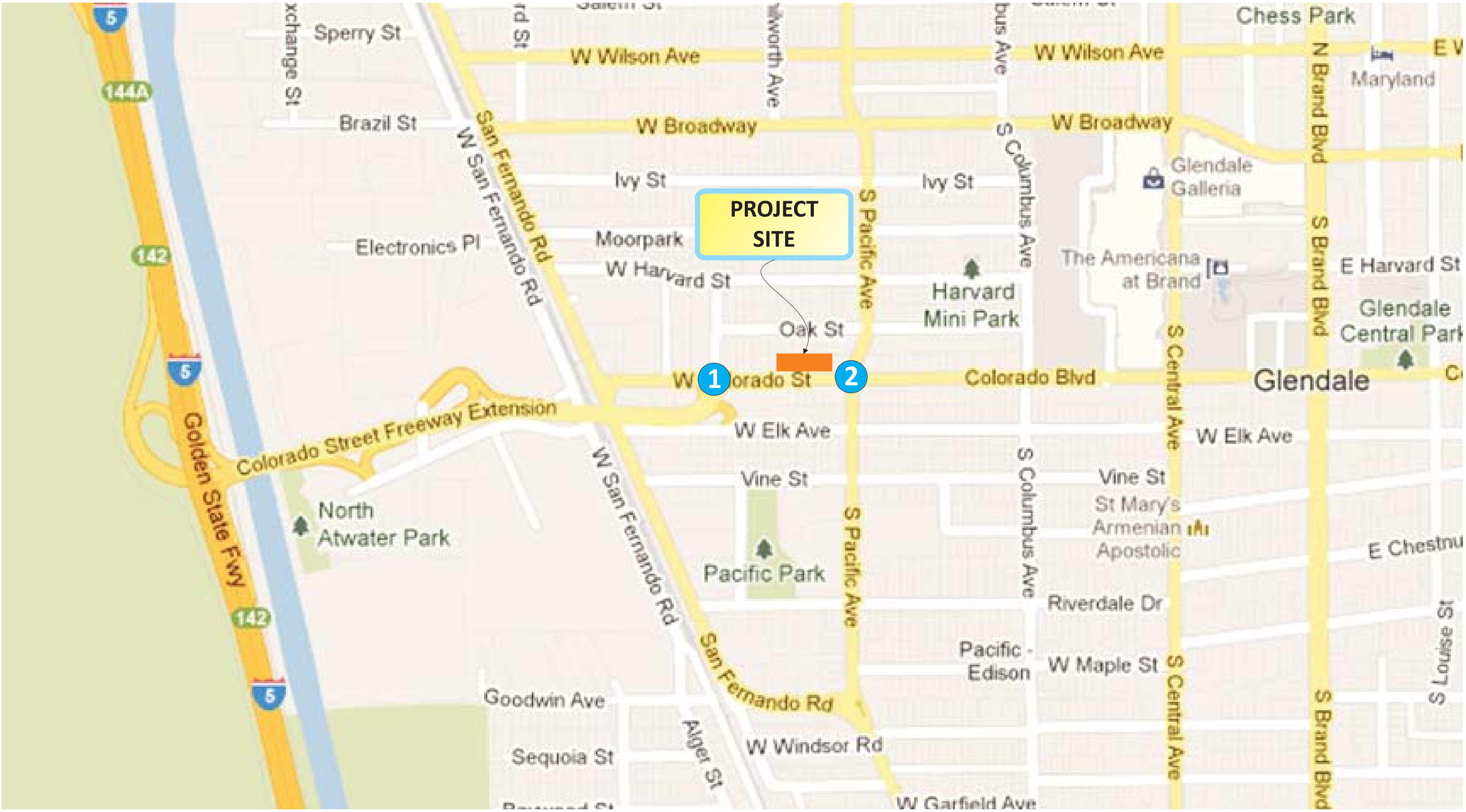
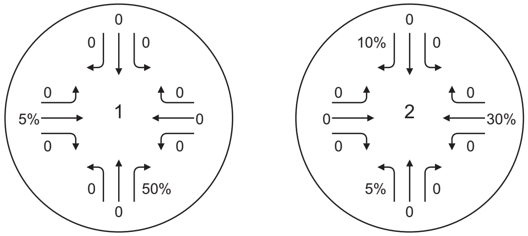
Figure 9

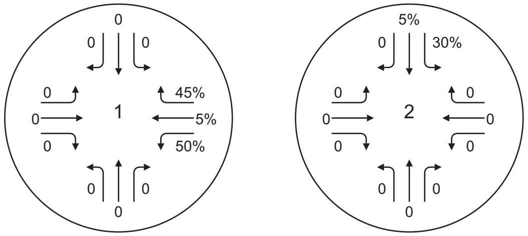
Future with-Project Traffic Volumes - AM and PM Peak Hour



INBOUND TRIPS



OUTBOUND TRIPS



Legend

🟧	Project Site Location
#	Study Intersection and Reference Number
XXX	Intersection Turn Volume

10/01/13

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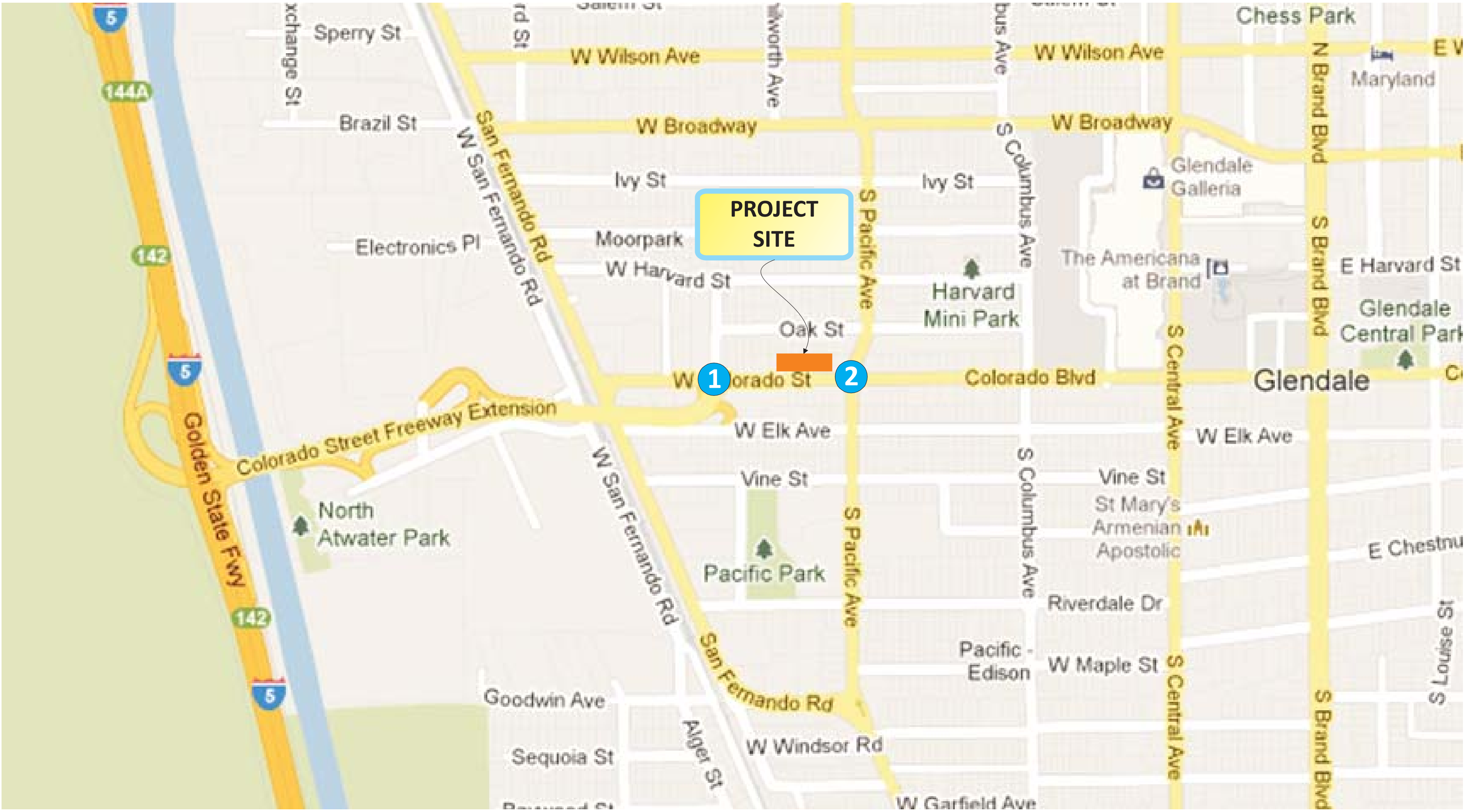
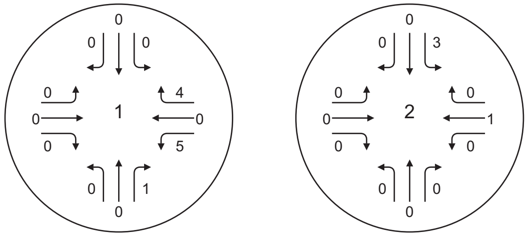
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 10

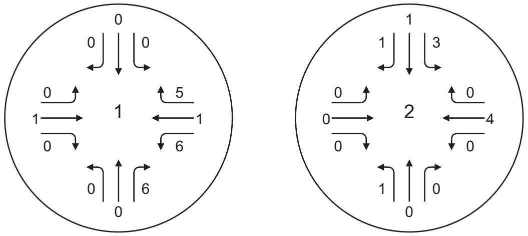
Project Access Alternative (Left-Turn Egress Prohibited) - Project Trip Distribution Percentages



AM PEAK HOUR



PM PEAK HOUR



N

Legend

🟧	Project Site Location
#	Study Intersection and Reference Number
XXX	Intersection Turn Volume

10/01/13

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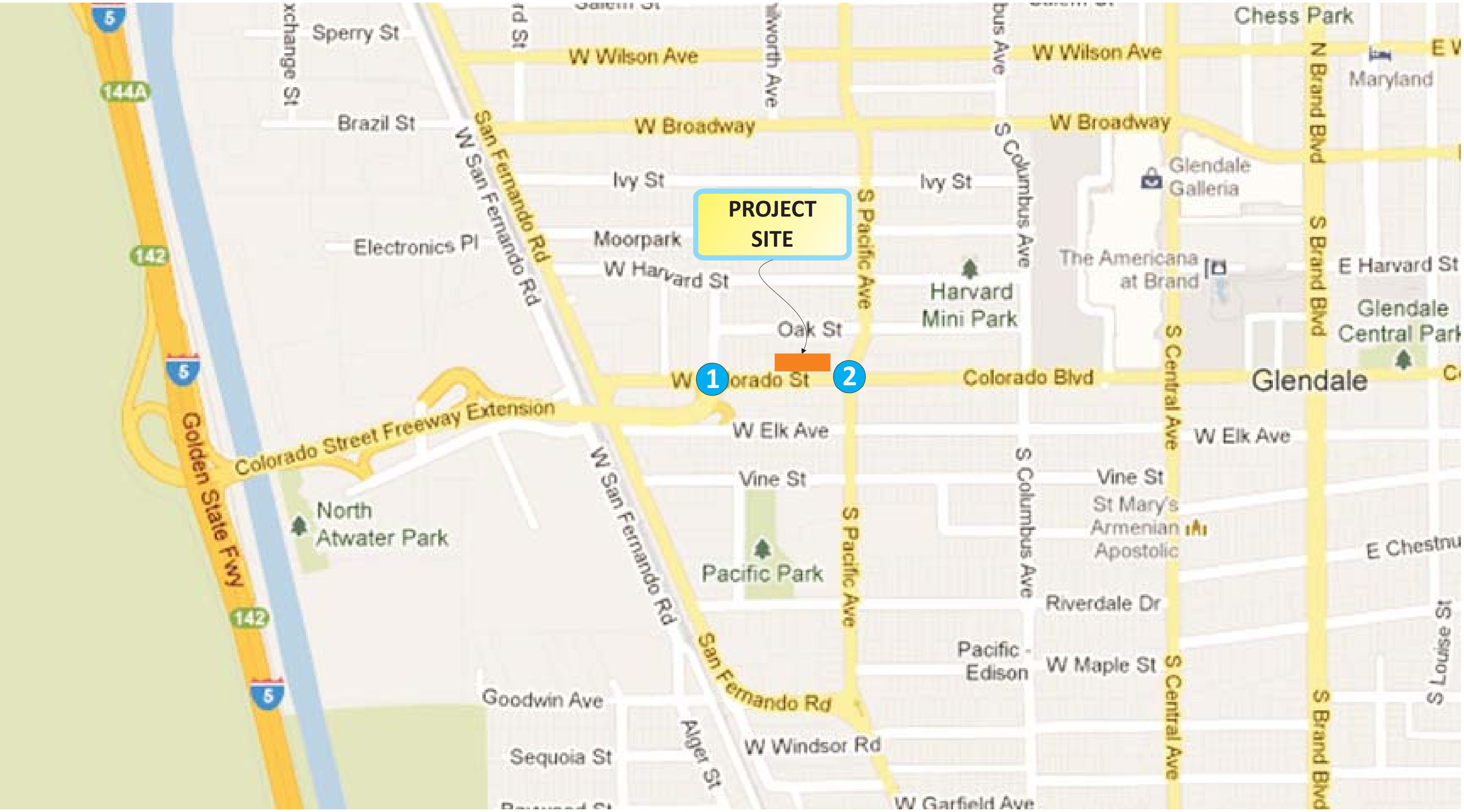
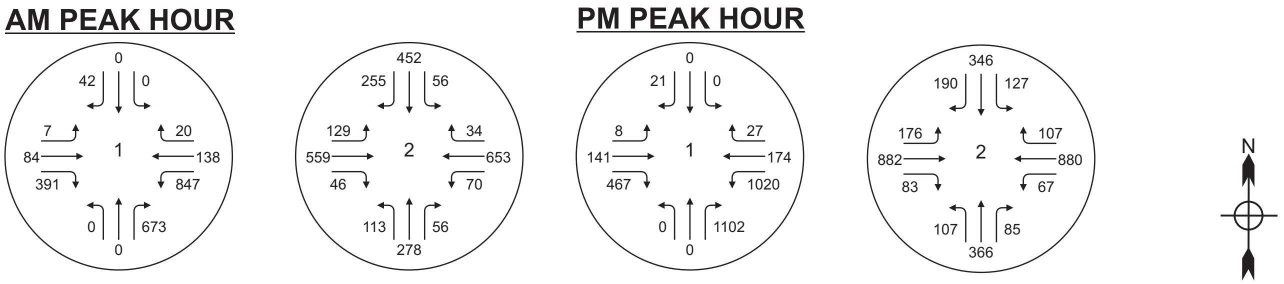
Figure 11

Project Access Alternative (Left-Turn Egress Prohibited) - ProjectTraffic Volumes - AM and PM Peak Hour





Legend

🟧	Project Site Location
#	Study Intersection and Reference Number
XXX	Intersection Turn Volume

10/01/13

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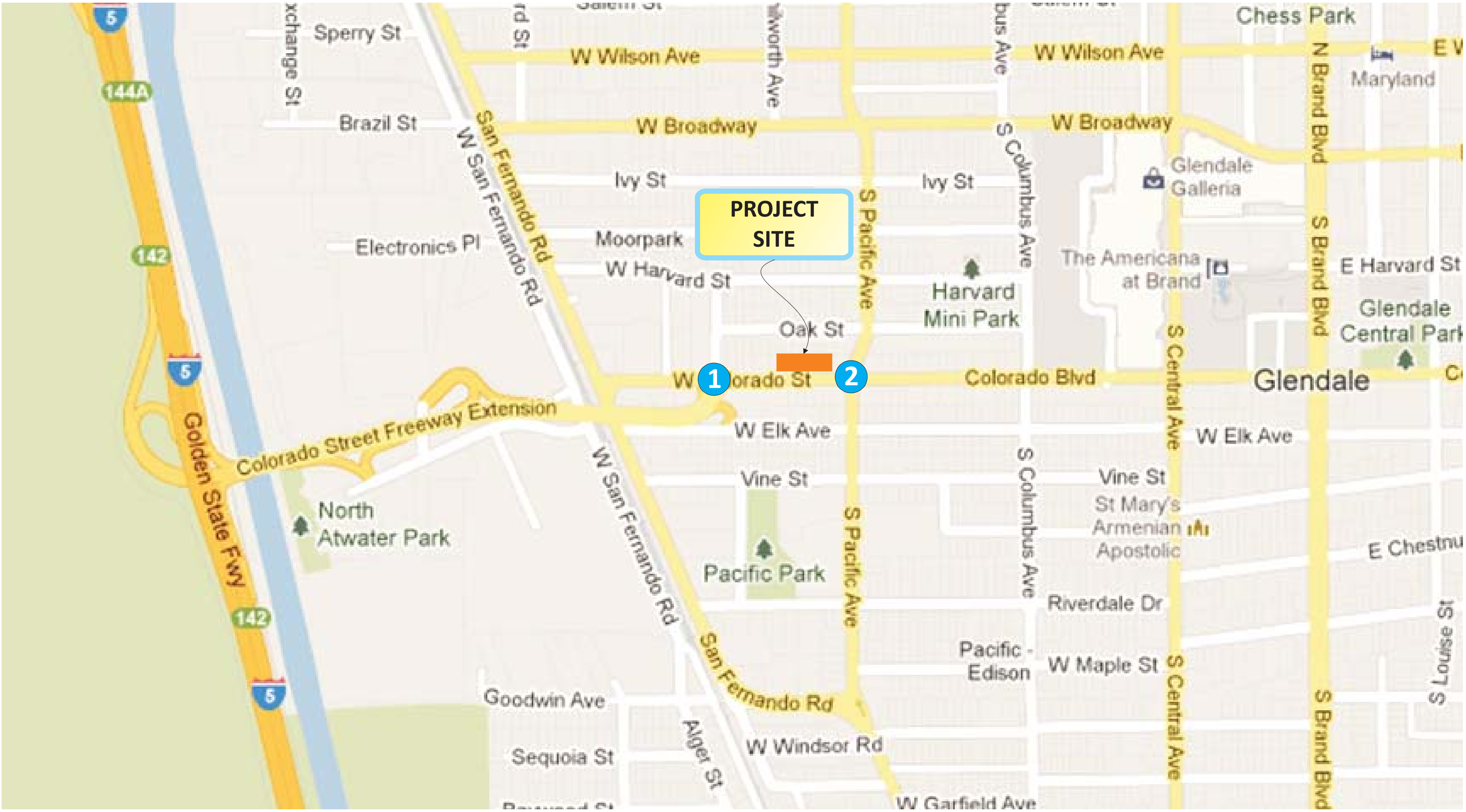
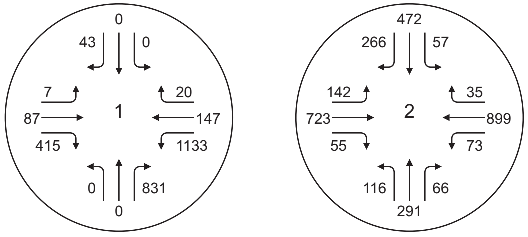
507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure 12

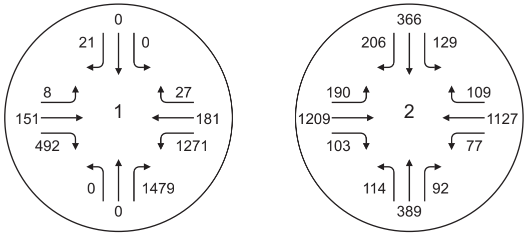
Project Access Alternative (Left-Turn Egress Prohibited) - Existing with-Project Traffic Volumes - AM and PM Peak Hour



AM PEAK HOUR



PM PEAK HOUR



Legend

🟧 Project Site Location

Study Intersection and Reference Number

XXX↓ Intersection Turn Volume

10/01/13

N

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Figure 13

Project Access Alternative (Left-Turn Egress Prohibited) - Future with-Project Traffic Volumes - AM and PM Peak Hour

ATTACHMENT B

INTERSECTION TRAFFIC COUNTS

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Colorado St Freeway Extn/Kenilworth Ave and Colorado St , City of Glendale

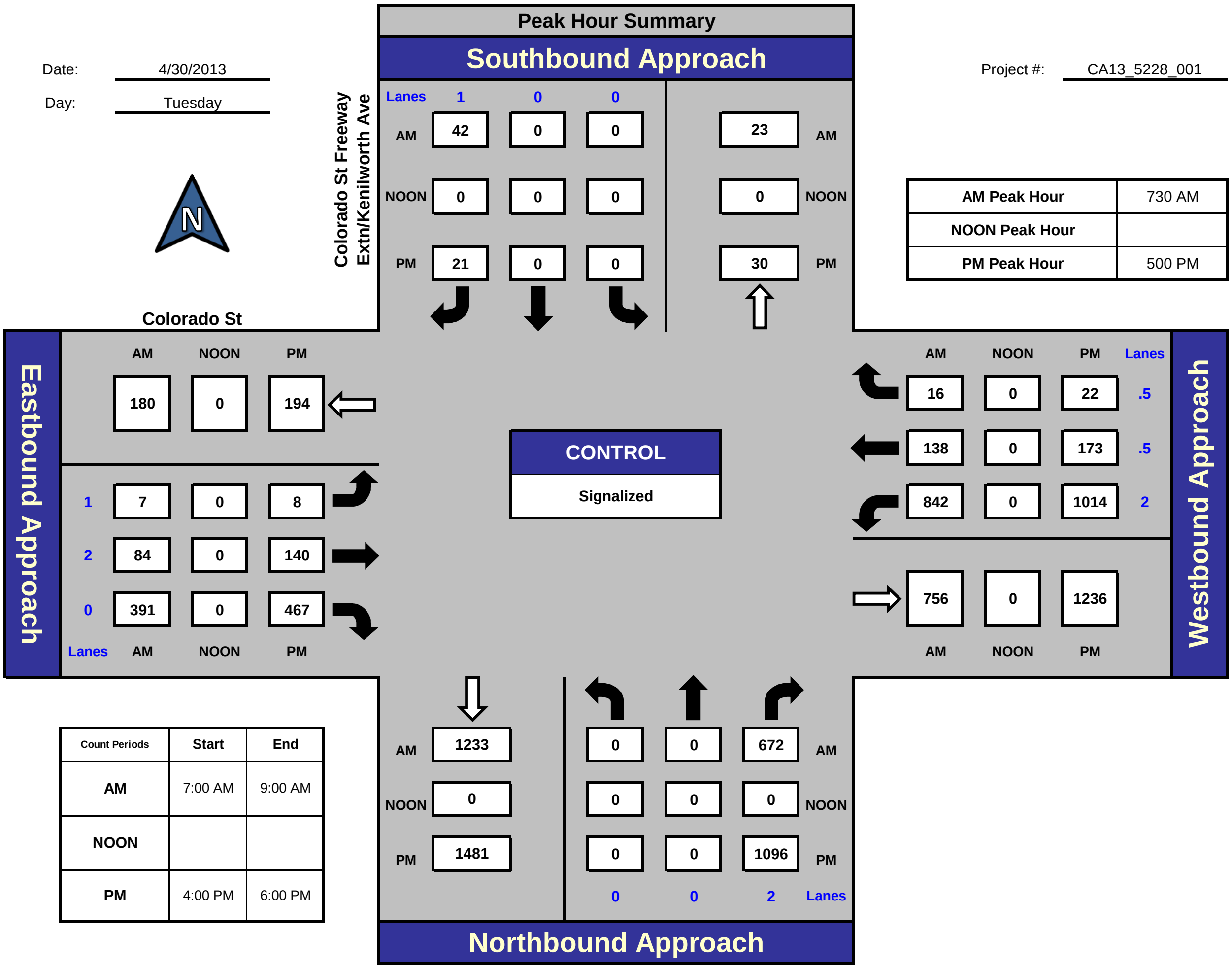
Date: 4/30/2013

Day: Tuesday

Project #: CA13_5228_001

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Peak Hour Summary

Southbound Approach

Lanes	1	0	0		
AM	42	0	0	23	AM
NOON	0	0	0	0	NOON
PM	21	0	0	30	PM

Eastbound Approach

	AM	NOON	PM
	180	0	194
1	7	0	8
2	84	0	140
0	391	0	467
Lanes	AM	NOON	PM

Westbound Approach

AM	NOON	PM	Lanes
16	0	22	.5
138	0	173	.5
842	0	1014	2
756	0	1236	
AM	NOON	PM	

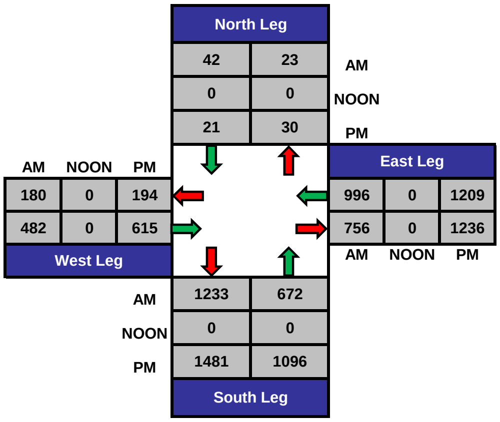
CONTROL

Signalized

Northbound Approach

AM	1233	0	0	672	AM
NOON	0	0	0	0	NOON
PM	1481	0	0	1096	PM
		0	0	2	Lanes

Total Ins & Outs



North Leg

42	23	AM
0	0	NOON
21	30	PM

West Leg

AM	NOON	PM
180	0	194
482	0	615

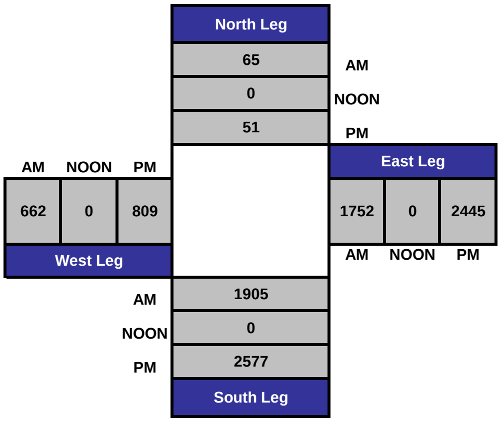
East Leg

996	0	1209
756	0	1236
AM	NOON	PM

South Leg

AM	1233	672
NOON	0	0
PM	1481	1096

Total Volume Per Leg



North Leg

65	AM
0	NOON
51	PM

West Leg

AM	NOON	PM
662	0	809

East Leg

1752	0	2445
AM	NOON	PM

South Leg

AM	1905
NOON	0
PM	2577

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA13_5228_001 **Day:** TUESDAY

City: City of Glendale **Date:** 4/30/2013

AM

NS/EW Streets:	Colorado St Freeway Extn/Kenilworth Ave			Colorado St Freeway Extn/Kenilworth Ave			Colorado St			Colorado St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	2	0	0	1	1	2	0	2	.5	.5	
7:00 AM			133			4	1	9	80	166	18	4	415
7:15 AM			137			6	1	10	84	208	21	3	470
7:30 AM			161			11	0	10	95	234	29	4	544
7:45 AM			199			11	5	25	96	191	37	1	565
8:00 AM			171			6	1	23	108	210	46	7	572
8:15 AM			141			14	1	26	92	207	26	4	511
8:30 AM			178			4	4	16	99	180	40	3	524
8:45 AM			193			1	0	24	69	175	39	5	506

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	1313	0	0	57	13	143	723	1571	256	31	4107
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	1.48%	16.27%	82.25%	84.55%	13.78%	1.67%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	0	672	0	0	42	7	84	391	842	138	16	2192
PEAK HR FACTOR :		0.844			0.750			0.913			0.933		0.958

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA13_5228_001

Day: TUESDAY

City: City of Glendale

Date: 4/30/2013

PM

NS/EW Streets:	Colorado St Freeway Extn/Kenilworth Ave			Colorado St Freeway Extn/Kenilworth Ave			Colorado St			Colorado St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	2	0	0	1	1	2	0	2	.5	.5	
4:00 PM			241			4	4	27	91	239	35	8	649
4:15 PM			255			2	0	30	84	212	45	7	635
4:30 PM			265			1	3	25	125	231	40	10	700
4:45 PM			242			5	0	20	84	246	30	7	634
5:00 PM			279			8	2	39	155	282	53	5	823
5:15 PM			258			3	3	34	99	234	53	4	688
5:30 PM			279			5	1	35	137	238	30	9	734
5:45 PM			280			5	2	32	76	260	37	4	696

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	2099	0	0	33	15	242	851	1942	323	54	5559
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	1.35%	21.84%	76.81%	83.74%	13.93%	2.33%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	1096	0	0	21	8	140	467	1014	173	22	2941
PEAK HR FACTOR :		0.979			0.656			0.784			0.889		0.893

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Pacific Ave and Colorado St , City of Glendale

Date: 4/30/2013

Day: Tuesday

Project #: CA13_5228_002

N

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Pacific Ave

Colorado St

Southbound Approach

Lanes	1	1	1		
AM	255	452	53	441	AM
NOON	0	0	0	0	NOON
PM	189	345	124	649	PM
	↲	↓	↳	⇧	

Eastbound Approach

	AM	NOON	PM	
	1020	0	1171	⇦
1	129	0	176	↱
2	559	0	882	→
0	46	0	83	↴
Lanes	AM	NOON	PM	

Westbound Approach

	AM	NOON	PM	Lanes
↰	34	0	107	0
←	652	0	876	2
↲	70	0	67	1
⇨	668	0	1091	
	AM	NOON	PM	

CONTROL

Signalized

Northbound Approach

	⇩	↰	↑	↱	
AM	568	113	278	56	AM
NOON	0	0	0	0	NOON
PM	495	106	366	85	PM
		1	1.5	.5	Lanes

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

North Leg

760	441	AM
0	0	NOON
658	649	PM

West Leg

AM	NOON	PM	
1020	0	1171	←
734	0	1141	→

East Leg

	AM	NOON	PM
←	756	0	1050
→	668	0	1091

South Leg

AM	568	447
NOON	0	0
PM	495	557

Total Volume Per Leg

North Leg

1201	AM
0	NOON
1307	PM

West Leg

AM	NOON	PM
1754	0	2312

East Leg

AM	NOON	PM
1424	0	2141

South Leg

AM	1015
NOON	0
PM	1052

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA13_5228_002 **Day:** TUESDAY

City: City of Glendale **Date:** 4/30/2013

AM

NS/EW Streets:	Pacific Ave			Pacific Ave			Colorado St			Colorado St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1.5	.5	1	1	1	1	2	0	1	2	0	
7:00 AM	25	40	11	12	60	68	34	98	6	14	103	4	475
7:15 AM	29	45	6	14	99	77	21	110	5	16	129	5	556
7:30 AM	28	75	15	11	105	64	24	127	11	20	163	8	651
7:45 AM	32	79	18	11	133	50	40	156	21	27	157	10	734
8:00 AM	27	80	18	15	96	64	34	159	6	13	184	6	702
8:15 AM	26	44	5	16	118	77	31	117	8	10	148	10	610
8:30 AM	26	49	5	28	96	39	33	153	8	5	154	9	605
8:45 AM	26	36	13	27	91	27	43	164	10	10	148	6	601

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	219	448	91	134	798	466	260	1084	75	115	1186	58	4934
APPROACH %'s :	28.89%	59.10%	12.01%	9.59%	57.08%	33.33%	18.32%	76.39%	5.29%	8.46%	87.27%	4.27%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	113	278	56	53	452	255	129	559	46	70	652	34	2697
PEAK HR FACTOR :		0.866			0.900			0.846			0.931		0.919

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA13_5228_002 **Day:** TUESDAY

City: City of Glendale **Date:** 4/30/2013

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			Colorado St			Colorado St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1.5	.5	1	1	1	1	2	0	1	2	0	
4:00 PM	23	84	22	32	64	40	47	209	9	23	225	21	799
4:15 PM	19	78	11	29	64	29	47	211	12	13	210	21	744
4:30 PM	22	74	25	31	75	41	43	217	23	15	227	26	819
4:45 PM	21	97	22	32	86	50	47	208	18	20	201	27	829
5:00 PM	30	86	22	33	98	44	45	235	26	17	251	33	920
5:15 PM	33	109	16	28	86	54	41	222	16	15	197	21	838
5:30 PM	23	70	10	25	83	39	60	221	13	17	202	21	784
5:45 PM	21	77	13	41	69	37	54	228	18	17	232	22	829

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	192	675	141	251	625	334	384	1751	135	137	1745	192	6562
APPROACH %'s :	19.05%	66.96%	13.99%	20.74%	51.65%	27.60%	16.92%	77.14%	5.95%	6.61%	84.14%	9.26%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	106	366	85	124	345	189	176	882	83	67	876	107	3406
PEAK HR FACTOR :		0.881			0.940			0.932			0.872		0.926

CONTROL : Signalized

Prepared by NDS/ATD

VOLUME

Kenilworth Ave btwn Colorado St & Oak St

Day: Tuesday
Date: 4/30/2013

City: Glendale
Project #: CA13_5229_001

DAILY TOTALS	NB	SB	EB	WB	Total
	476	316	0	0	792

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		0				3		12:00	18		4				22	
00:15	0		2				2		12:15	13		6				19	
00:30	1		0				1		12:30	16		5				21	
00:45	0	4	0	2			0	6	12:45	16	63	2	17			18	80
01:00	0		0				0		13:00	11		5				16	
01:15	3		0				3		13:15	10		10				20	
01:30	1		0				1		13:30	11		8				19	
01:45	1	5	0				1	5	13:45	9	41	6	29			15	70
02:00	2		0				2		14:00	5		4				9	
02:15	0		0				0		14:15	8		8				16	
02:30	1		0				1		14:30	7		2				9	
02:45	0	3	0				0	3	14:45	5	25	6	20			11	45
03:00	0		1				1		15:00	10		4				14	
03:15	0		1				1		15:15	15		2				17	
03:30	0		0				0		15:30	4		5				9	
03:45	0		0	2			0	2	15:45	9	38	1	12			10	50
04:00	0		0				0		16:00	11		4				15	
04:15	0		1				1		16:15	8		2				10	
04:30	0		0				0		16:30	11		1				12	
04:45	0		1	2			1	2	16:45	9	39	5	12			14	51
05:00	0		2				2		17:00	6		7				13	
05:15	1		1				2		17:15	8		4				12	
05:30	0		1				1		17:30	8		6				14	
05:45	1	2	0	4			1	6	17:45	8	30	4	21			12	51
06:00	1		1				2		18:00	8		7				15	
06:15	0		2				2		18:15	4		6				10	
06:30	1		0				1		18:30	3		4				7	
06:45	0	2	2	5			2	7	18:45	10	25	4	21			14	46
07:00	4		5				9		19:00	6		4				10	
07:15	4		5				9		19:15	4		0				4	
07:30	5		11				16		19:30	2		0				2	
07:45	5	18	11	32			16	50	19:45	8	20	5	9			13	29
08:00	8		6				14		20:00	6		2				8	
08:15	4		14				18		20:15	3		1				4	
08:30	7		4				11		20:30	4		2				6	
08:45	6	25	2	26			8	51	20:45	1	14	1	6			2	20
09:00	4		9				13		21:00	5		1				6	
09:15	5		9				14		21:15	2		5				7	
09:30	2		4				6		21:30	1		1				2	
09:45	6	17	2	24			8	41	21:45	3	11	2	9			5	20
10:00	2		6				8		22:00	2		1				3	
10:15	8		2				10		22:15	1		3				4	
10:30	15		6				21		22:30	1		2				3	
10:45	11	36	4	18			15	54	22:45	0	4	5	11			5	15
11:00	10		9				19		23:00	0		1				1	
11:15	9		9				18		23:15	2		3				5	
11:30	12		8				20		23:30	1		2				3	
11:45	19	50	2	28			21	78	23:45	1	4	0	6			1	10
TOTALS		162		143				**305**	**TOTALS**		314		173				**487**
SPLIT %		53.1%		46.9%				**38.5%**	**SPLIT %**		64.5%		35.5%				**61.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	476	316	0	0	792

	NB	SB	EB	WB	Total		NB	SB	EB	WB	Total
AM Peak Hour	11:45	07:30			**11:45**	**PM Peak Hour**	12:00	13:00			**12:00**
AM Pk Volume	66	42			**83**	**PM Pk Volume**	63	29			**80**
Pk Hr Factor	0.868	0.750			**0.943**	**Pk Hr Factor**	0.875	0.725			**0.909**
7 - 9 Volume	43	58	0	0	**101**	**4 - 6 Volume**	69	33	0	0	**102**
7 - 9 Peak Hour	08:00	07:30			**07:30**	**4 - 6 Peak Hour**	16:00	16:45			**16:45**
7 - 9 Pk Volume	25	42	0	0	**64**	**4 - 6 Pk Volume**	39	22	0	0	**53**
Pk Hr Factor	0.781	0.750	0.000	0.000	**0.889**	**Pk Hr Factor**	0.886	0.786	0.000	0.000	**0.946**

Prepared by NDS/ATD

VOLUME

Harvard St btwn Kenilworth Ave & Pacific Ave

Day: Tuesday
Date: 4/30/2013

City: Glendale
Project #: CA13_5229_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	771	506	1,277

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		2		2		12:00			18		8		26	
00:15			0		0		0		12:15			19		12		31	
00:30			0		0		0		12:30			19		5		24	
00:45			1	1	1	3	2	4	12:45			15	71	9	34	24	105
01:00			0		0		0		13:00			18		4		22	
01:15			0		0		0		13:15			17		10		27	
01:30			0		0		0		13:30			17		8		25	
01:45			0		0		0		13:45			10	62	7	29	17	91
02:00			2		0		2		14:00			13		9		22	
02:15			0		0		0		14:15			13		11		24	
02:30			0		0		0		14:30			10		11		21	
02:45			0	2	0		0	2	14:45			12	48	10	41	22	89
03:00			0		0		0		15:00			7		7		14	
03:15			0		0		0		15:15			10		3		13	
03:30			0		1		1		15:30			16		7		23	
03:45			0		1	2	1	2	15:45			13	46	7	24	20	70
04:00			0		0		0		16:00			13		9		22	
04:15			0		0		0		16:15			6		11		17	
04:30			0		1		1		16:30			18		7		25	
04:45			0		3	4	3	4	16:45			11	48	14	41	25	89
05:00			0		1		1		17:00			19		6		25	
05:15			1		0		1		17:15			20		8		28	
05:30			2		0		2		17:30			9		7		16	
05:45			1	4	5	6	6	10	17:45			9	57	9	30	18	87
06:00			0		2		2		18:00			10		8		18	
06:15			1		3		4		18:15			12		6		18	
06:30			3		0		3		18:30			10		5		15	
06:45			4	8	7	12	11	20	18:45			9	41	8	27	17	68
07:00			1		5		6		19:00			14		5		19	
07:15			7		3		10		19:15			10		5		15	
07:30			7		12		19		19:30			7		4		11	
07:45			9	24	14	34	23	58	19:45			9	40	6	20	15	60
08:00			5		13		18		20:00			17		2		19	
08:15			11		12		23		20:15			7		10		17	
08:30			9		6		15		20:30			9		5		14	
08:45			15	40	11	42	26	82	20:45			9	42	5	22	14	64
09:00			13		11		24		21:00			9		2		11	
09:15			9		7		16		21:15			6		6		12	
09:30			16		5		21		21:30			6		4		10	
09:45			4	42	12	35	16	77	21:45			5	26	4	16	9	42
10:00			13		11		24		22:00			1		0		1	
10:15			14		9		23		22:15			4		0		4	
10:30			21		11		32		22:30			6		0		6	
10:45			16	64	12	43	28	107	22:45			3	14	1	1	4	15
11:00			13		8		21		23:00			2		1		3	
11:15			22		6		28		23:15			2		1		3	
11:30			14		11		25		23:30			3		3		6	
11:45			31	80	8	33	39	113	23:45			4	11	2	7	6	18
TOTALS				265		214		**479**	**TOTALS**				506		292		**798**
SPLIT %				55.3%		44.7%		**37.5%**	**SPLIT %**				63.4%		36.6%		**62.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	771	506	1,277

AM Peak Hour			11:45	07:30	**11:30**	**PM Peak Hour**			12:00	14:00	**12:00**
AM Pk Volume			87	51	**121**	**PM Pk Volume**			71	41	**105**
Pk Hr Factor			0.702	0.911	**0.776**	**Pk Hr Factor**			0.934	0.932	**0.847**
7 - 9 Volume	0	0	64	76	**140**	**4 - 6 Volume**	0	0	105	71	**176**
7 - 9 Peak Hour			08:00	07:30	**07:30**	**4 - 6 Peak Hour**			16:30	16:00	**16:30**
7 - 9 Pk Volume	0	0	40	51	**83**	**4 - 6 Pk Volume**	0	0	68	41	**103**
Pk Hr Factor	0.000	0.000	0.667	0.911	**0.902**	**Pk Hr Factor**	0.000	0.000	0.850	0.732	**0.920**

Prepared by NDS/ATD

VOLUME

Oak St btwn Kenilworth Ave & Pacific Ave

Day: Tuesday
Date: 4/30/2013

City: Glendale
Project #: CA13_5229_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	350	305	655

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		1		2		12:00			6		3		9	
00:15			0		0		0		12:15			6		5		11	
00:30			1		0		1		12:30			13		3		16	
00:45			1	3	0	1	1	4	12:45			6	31	4	15	10	46
01:00			0		0		0		13:00			7		8		15	
01:15			1		0		1		13:15			3		5		8	
01:30			2		0		2		13:30			4		2		6	
01:45			0	3	0		0	3	13:45			11	25	3	18	14	43
02:00			0		0		0		14:00			5		7		12	
02:15			0		0		0		14:15			1		2		3	
02:30			1		0		1		14:30			6		3		9	
02:45			0	1	0		0	1	14:45			3	15	3	15	6	30
03:00			1		0		1		15:00			6		5		11	
03:15			0		0		0		15:15			9		10		19	
03:30			0		0		0		15:30			4		4		8	
03:45			0	1	0		0	1	15:45			6	25	2	21	8	46
04:00			1		0		1		16:00			6		4		10	
04:15			0		0		0		16:15			3		2		5	
04:30			0		0		0		16:30			7		5		12	
04:45			0	1	1	1	1	2	16:45			7	23	6	17	13	40
05:00			0		1		1		17:00			10		13		23	
05:15			2		1		3		17:15			5		8		13	
05:30			0		0		0		17:30			6		5		11	
05:45			1	3	0	2	1	5	17:45			4	25	10	36	14	61
06:00			2		0		2		18:00			7		4		11	
06:15			1		2		3		18:15			6		6		12	
06:30			2		2		4		18:30			10		4		14	
06:45			3	8	2	6	5	14	18:45			9	32	12	26	21	58
07:00			0		5		5		19:00			4		7		11	
07:15			5		8		13		19:15			6		6		12	
07:30			3		6		9		19:30			8		2		10	
07:45			3	11	9	28	12	39	19:45			7	25	1	16	8	41
08:00			8		5		13		20:00			1		3		4	
08:15			4		9		13		20:15			3		2		5	
08:30			8		4		12		20:30			4		2		6	
08:45			5	25	2	20	7	45	20:45			3	11	0	7	3	18
09:00			3		10		13		21:00			3		3		6	
09:15			8		3		11		21:15			8		2		10	
09:30			3		4		7		21:30			5		1		6	
09:45			1	15	1	18	2	33	21:45			1	17	5	11	6	28
10:00			5		3		8		22:00			4		2		6	
10:15			5		3		8		22:15			0		5		5	
10:30			6		3		9		22:30			2		6		8	
10:45			2	18	4	13	6	31	22:45			2	8	3	16	5	24
11:00			5		1		6		23:00			1		1		2	
11:15			3		5		8		23:15			0		3		3	
11:30			7		0		7		23:30			0		2		2	
11:45			7	22	3	9	10	31	23:45			1	2	3	9	4	11
TOTALS				111		98		**209**	**TOTALS**				239		207		**446**
SPLIT %				53.1%		46.9%		**31.9%**	**SPLIT %**				53.6%		46.4%		**68.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	350	305	655

AM Peak Hour			11:45	07:30	**07:45**	**PM Peak Hour**			12:15	17:00	**16:30**
AM Pk Volume			32	29	**50**	**PM Pk Volume**			32	36	**61**
Pk Hr Factor			0.615	0.806	**0.962**	**Pk Hr Factor**			0.615	0.692	**0.663**
7 - 9 Volume	0	0	36	48	**84**	**4 - 6 Volume**	0	0	48	53	**101**
7 - 9 Peak Hour			08:00	07:30	**07:45**	**4 - 6 Peak Hour**			16:30	17:00	**16:30**
7 - 9 Pk Volume	0	0	25	29	**50**	**4 - 6 Pk Volume**	0	0	29	36	**61**
Pk Hr Factor	0.000	0.000	0.781	0.806	**0.962**	**Pk Hr Factor**	0.000	0.000	0.725	0.692	**0.663**

ATTACHMENT C

EXISTING INTERSECTION
LEVEL OF SERVICE WORKSHEETS

```
-------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                            Existing Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*******************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
*******************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.471
Loss Time (sec):      10                Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        32                Level Of Service:                  A
*******************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext               Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Permitted        Permitted        Protected        Protected
Rights:           Ovl            Include          Ignore           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0   672    0    0    42    7   84   391  842  138    16
Growth Adj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0   672    0    0    42    7   84   391  842  138    16
User Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Volume:    0    0   672    0    0    42    7   84     0  842  138    16
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0   672    0    0    42    7   84     0  842  138    16
PCE Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
FinalVolume:   0    0   672    0    0    42    7   84     0  842  138    16
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.90 1.00  1.00
Lanes:      0.00 0.00  2.00 0.00 0.00  1.00 1.00 1.00  1.00 2.00 0.90  0.10
Final Sat.:    0    0  3200    0    0  1600 1600 1600  1600 2880 1434   166
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.00  0.21 0.00 0.00  0.03 0.00 0.05  0.00 0.29 0.10  0.10
OvlAdjV/S:             0.00
Crit Moves: ****                       ****      ****      ****
*******************************************************************************
```

```
-------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                            Existing Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*******************************************************************************
Intersection #2 Pacific Ave & Colorado St
*******************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.748
Loss Time (sec):      10                Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        57                Level Of Service:                  C
*******************************************************************************
Street Name:              Pacific Ave                    Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected       Prot+Permit      Prot+Permit
Rights:         Include            Ovl            Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    113  278    56   53  452   255  129  559    46   70  652    34
Growth Adj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse: 113  278    56   53  452   255  129  559    46   70  652    34
User Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:  113  278    56   53  452   255  129  559    46   70  652    34
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol: 113  278    56   53  452   255  129  559    46   70  652    34
PCE Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
FinalVolume: 113  278    56   53  452   255  129  559    46   70  652    34
OvlAdjVol:                                126
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:      1.00 1.66  0.34 1.00 1.00  1.00 1.00 1.85  0.15 1.00 1.90  0.10
Final Sat.: 1600 2663   537 1600 1600  1600 1600 2957   243 1600 3041   159
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.07 0.10  0.10 0.03 0.28  0.16 0.08 0.19  0.19 0.04 0.21  0.21
OvlAdjV/S:                             0.08
Crit Moves: ****                 ****       ****                 ****
*******************************************************************************
```

```
--------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                            Existing Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.553
Loss Time (sec):       10              Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         37              Level Of Service:                  A
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext              Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:            Ovl            Include          Ignore           Include
Min. Green:    0    0    0     0    0    0     0    0    0     0    0    0
Y+R:         4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0
Lanes:        0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0 1096     0    0   21     8  140  467  1014  173   22
Growth Adj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0 1096     0    0   21     8  140  467  1014  173   22
User Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00
PHF Volume:    0    0 1096     0    0   21     8  140    0  1014  173   22
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0 1096     0    0   21     8  140    0  1014  173   22
PCE Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00
FinalVolume:   0    0 1096     0    0   21     8  140    0  1014  173   22
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600
Adjustment: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.90 1.00 1.00
Lanes:      0.00 0.00 2.00  0.00 0.00 1.00  1.00 1.00 1.00  2.00 0.89 0.11
Final Sat.:    0    0 3200     0    0 1600  1600 1600 1600  2880 1419  181
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.00 0.34  0.00 0.00 0.01  0.01 0.09 0.00  0.35 0.12 0.12
OvlAdjV/S:           0.00
Crit Moves: ****                      ****       ****         ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                            Existing Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.799
Loss Time (sec):       10              Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         66              Level Of Service:                  C
********************************************************************************
Street Name:                Pacific Ave                     Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:          Include            Ovl            Include          Include
Min. Green:    0    0    0     0    0    0     0    0    0     0    0    0
Y+R:         4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0
Lanes:        1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    106  366   85   124  345  189   176  882   83    67  876  107
Growth Adj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse: 106  366   85   124  345  189   176  882   83    67  876  107
User Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:  106  366   85   124  345  189   176  882   83    67  876  107
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol: 106  366   85   124  345  189   176  882   83    67  876  107
PCE Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume: 106  366   85   124  345  189   176  882   83    67  876  107
OvlAdjVol:                                13
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600
Adjustment: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:      1.00 1.62 0.38  1.00 1.00 1.00  1.00 1.83 0.17  1.00 1.78 0.22
Final Sat.: 1600 2597  603  1600 1600 1600  1600 2925  275  1600 2852  348
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.07 0.14 0.14  0.08 0.22 0.12  0.11 0.30 0.30  0.04 0.31 0.31
OvlAdjV/S:                            0.01
Crit Moves: ****                 ****       ****                   ****
********************************************************************************
```

ATTACHMENT D

EXISTING WITH-PROJECT INTERSECTION LEVEL OF SERVICE WORKSHEETS

```
Ex+Proj AM(Scen1)         Mon Nov 18, 2013 19:53:38                  Page 4-1
--------------------------------------------------------------------------------
                    507-525 W. Colorado St Mixed Use Project
                     Existing + Project Conditions (Scen 1)
                                  AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.473
Loss Time (sec):      10              Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        32              Level Of Service:                  A
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext            Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted       Protected        Protected
Rights:             Ovl            Include          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:        0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0   673     0    0    42     7   84   391   847  138    16
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0   673     0    0    42     7   84   391   847  138    16
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0   673     0    0    42     7   84   391   847  138    16
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0    0   673     0    0    42     7   84     0   847  138    16
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0   673     0    0    42     7   84     0   847  138    16
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:    0    0   673     0    0    42     7   84     0   847  138    16
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.90 1.00  1.00
Lanes:       0.00 0.00  2.00  0.00 0.00  1.00  1.00 1.00  1.00  2.00 0.90  0.10
Final Sat.:     0    0  3200     0    0  1600  1600 1600  1600  2880 1434   166
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.21  0.00 0.00  0.03  0.00 0.05  0.00  0.29 0.10  0.10
OvlAdjV/S:              0.00
Crit Moves:  ****                        ****       ****        ****
********************************************************************************
```

```
Ex+Proj AM(Scen1)         Mon Nov 18, 2013 19:53:39                  Page 5-1
--------------------------------------------------------------------------------
                    507-525 W. Colorado St Mixed Use Project
                     Existing + Project Conditions (Scen 1)
                                  AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.749
Loss Time (sec):      10              Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        57              Level Of Service:                  C
********************************************************************************
Street Name:              Pacific Ave                      Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:          Include            Ovl            Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:        1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     113  278    56    53  452   255   130  562    46    70  653    34
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  113  278    56    53  452   255   130  562    46    70  653    34
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  113  278    56    53  452   255   130  562    46    70  653    34
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   113  278    56    53  452   255   130  562    46    70  653    34
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  113  278    56    53  452   255   130  562    46    70  653    34
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  113  278    56    53  452   255   130  562    46    70  653    34
OvlAdjVol:                                125
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.66  0.34  1.00 1.00  1.00  1.00 1.85  0.15  1.00 1.90  0.10
Final Sat.:  1600 2663   537  1600 1600  1600  1600 2958   242  1600 3042   158
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.10  0.10  0.03 0.28  0.16  0.08 0.19  0.19  0.04 0.21  0.21
OvlAdjV/S:                               0.08
Crit Moves:  ****                 ****        ****                    ****
********************************************************************************
```

```
-------------------------------------------------------------------------------
                 507-525 W. Colorado St Mixed Use Project
                  Existing + Project Conditions (Scen 1)
                              PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
*******************************************************************************
Cycle (sec):        100              Critical Vol./Cap.(X):        0.555
Loss Time (sec):     10              Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       37              Level Of Service:                 A
*******************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext             Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:            Ovl            Include          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:        0  0  0  0  2    0  0  0  0  1    1  0  1  0  1    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0  1102     0    0    21     8  141   467  1020  174    22
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0  1102     0    0    21     8  141   467  1020  174    22
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0  1102     0    0    21     8  141   467  1020  174    22
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0    0  1102     0    0    21     8  141     0  1020  174    22
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0  1102     0    0    21     8  141     0  1020  174    22
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:    0    0  1102     0    0    21     8  141     0  1020  174    22
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.90 1.00  1.00
Lanes:       0.00 0.00  2.00  0.00 0.00  1.00  1.00 1.00  1.00  2.00 0.89  0.11
Final Sat.:     0    0  3200     0    0  1600  1600 1600  1600  2880 1420   180
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.34  0.00 0.00  0.01  0.01 0.09  0.00  0.35 0.12  0.12
OvlAdjV/S:              0.00
Crit Moves:  ****                        ****       ****        ****
*******************************************************************************
```

```
-------------------------------------------------------------------------------
                 507-525 W. Colorado St Mixed Use Project
                  Existing + Project Conditions (Scen 1)
                              PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 Pacific Ave & Colorado St
*******************************************************************************
Cycle (sec):        100              Critical Vol./Cap.(X):        0.802
Loss Time (sec):     10              Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       67              Level Of Service:                 D
*******************************************************************************
Street Name:             Pacific Ave                      Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:          Include            Ovl            Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:        1  0  1  1  0    1  0  1  0  1    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     107  366    85   124  345   190   177  885    84    67  880   107
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  107  366    85   124  345   190   177  885    84    67  880   107
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  107  366    85   124  345   190   177  885    84    67  880   107
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   107  366    85   124  345   190   177  885    84    67  880   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  107  366    85   124  345   190   177  885    84    67  880   107
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  107  366    85   124  345   190   177  885    84    67  880   107
OvlAdjVol:                                 13
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.62  0.38  1.00 1.00  1.00  1.00 1.83  0.17  1.00 1.78  0.22
Final Sat.:  1600 2597   603  1600 1600  1600  1600 2923   277  1600 2853   347
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.14  0.14  0.08 0.22  0.12  0.11 0.30  0.30  0.04 0.31  0.31
OvlAdjV/S:                               0.01
Crit Moves:  ****                        ****  ****                  ****
*******************************************************************************
```

ATTACHMENT E

RELATED PROJECT TRIP GENERATION AND ASSIGNMENT

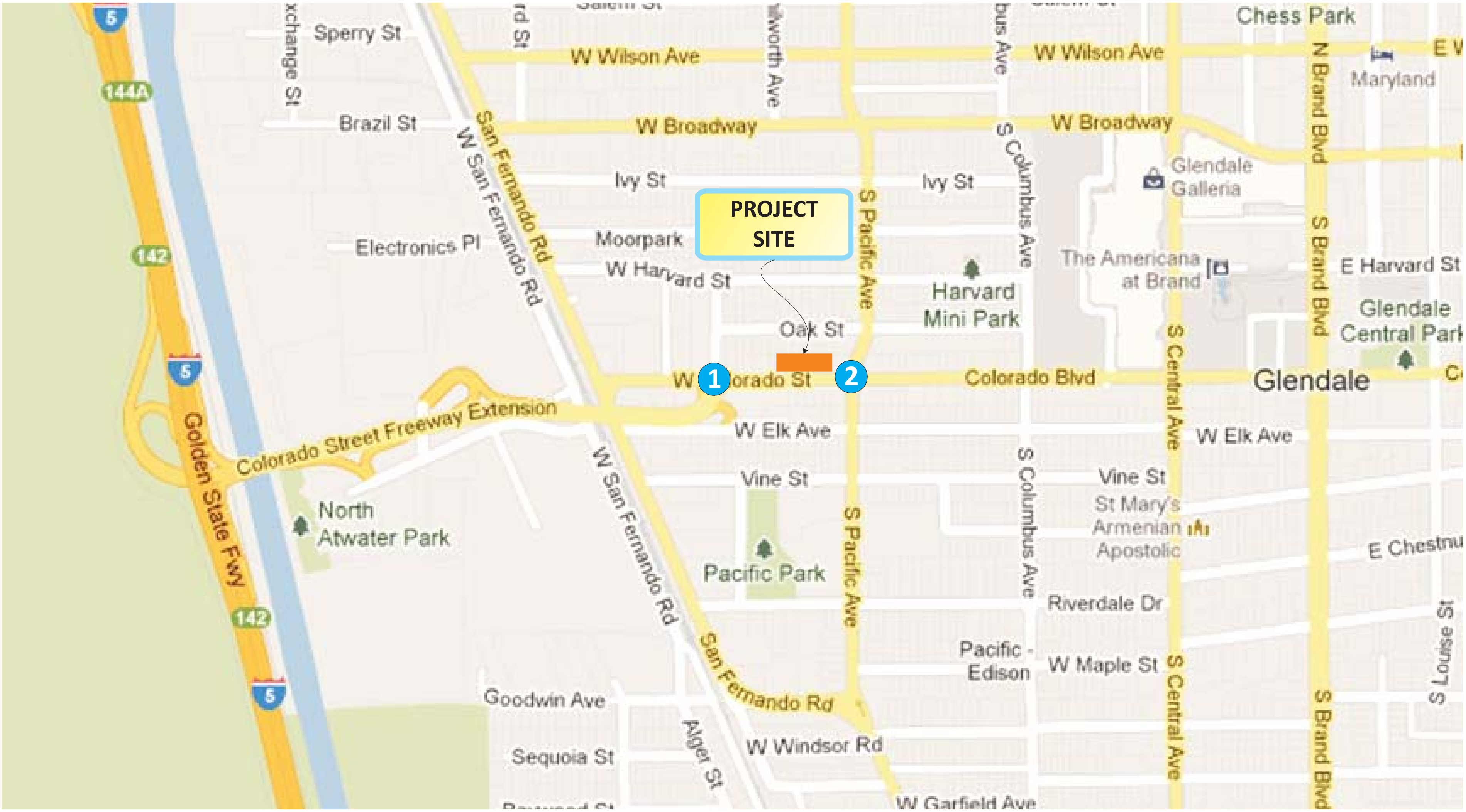
Table E – Area Project Trip Generation Summary

Map #	Project Name	Location	Land Use	Size	Unit	Weekday						
						Daily	AM Peak Hour			PM Peak Hour		
							In	Out	Total	In	Out	Total
1	ICIS Project	546 W. Colorado St. and 552 W. Elk Ave.	Multi-Family	200	DU	1,330	20	82	102	81	43	124
			Commercial	8,300	Sq. Ft.	354	5	3	8	15	16	31
					Total	1,684	25	85	110	96	59	155
2	Nordstrom at Americana	889 Americana Way	Commercial	119,119	Sq. Ft.	5,086	71	43	114	212	230	442
3	Verdugo Gardens III	610 N. Central Ave.	Multi-Family	235	DU	1,563	24	96	120	95	51	146
4	Legendary Tower	300 N. Central Ave.	Multi-Family	72	DU	479	7	30	37	29	16	45
			Live/Work	8	DU	53	1	3	4	3	2	5
			Commercial	1,240	Sq. Ft.	53	1	0	1	2	3	5
					Total	585	9	33	42	34	21	55
5	Brand + Wilson	124 W. Wilson Ave.	Multi-Family	235	DU	1,563	24	96	120	95	51	146
			Commercial	9,800	Sq. Ft.	418	6	3	9	17	19	36
					Total	1,981	30	99	129	112	70	182
6	The Lex on Orange	320-324 N. Central Ave.; 208 W. Lexington Dr.; and 317-345 N. Orange St.	Multi-Family	307	DU	2,042	31	126	157	124	66	190
			Live/Work	3	DU	20	0	2	2	1	1	2
					Total	2,062	31	128	159	125	67	192
7	Orange + Wilson	200 W. Wilson Ave.	Multi-Family	166	DU	1,104	17	68	85	67	36	103
			Live/Work	5	DU	33	1	2	3	2	1	3
			Restaurant	2,649	Sq. Ft.	337	16	13	29	16	10	26
					Total	1,474	34	83	117	85	47	132
8	Jackson & Colorado	228 S. Jackson St.	Multi-Family	28	DU	186	3	11	14	11	6	17
			Office	11,470	Sq. Ft.	127	16	2	18	3	14	17
					Total	313	19	13	32	14	20	34
9		301 N. Central Ave.	Multi-Family	84	Du	559	9	34	43	34	18	52
			Commercial	3,000	Sq. Ft.	128	2	1	3	5	6	11
					Total	687	11	35	46	39	24	63
10		1110 S. Central Ave.	Office	4,500	Sq. Ft.	50	6	1	7	1	6	7
11	Mitaa Plaza	435 Los Feliz Blvd	Day Spa	25,000	Sq. Ft.	N/A	30	0	30	6	30	36
			Market	36,000	Sq. Ft.	3,681	76	46	122	174	167	341
			Commercial	26,880	Sq. Ft.	1,148	16	10	26	48	52	100
			Restaurant	11,210	Sq. Ft.	1,425	67	54	121	66	44	110
			Office	32,000	Sq. Ft.	353	44	6	50	8	40	48
			Medical Office	32,000	Sq. Ft.	1,156	60	16	76	32	82	114
					Total	7,763	293	132	425	334	415	749
12	Veterans Village of Glendale	327 Salem St.	Multi-Family	44	DU	293	4	18	22	18	9	27
13		370 Salem St.	Multi-Family	17	DU	113	2	7	9	7	4	11
14		224 S. Jackson St.	Multi-Family	5	DU	33	1	2	3	2	1	3
			Commercial	11,373	Sq. Ft.	486	7	4	11	20	22	42
			Office	11,330	Sq. Ft.	125	16	2	18	3	14	17
					Total	644	24	8	32	25	37	62
15		347 Milford St.	Multi-Family	12	DU	80	1	5	6	5	2	7
16		604-610 W. Broadway	Office	12,802	Sq. Ft.	141	18	2	20	3	16	19
			Commercial	1,620	Sq. Ft.	69	1	1	2	3	3	6
					Total	210	19	3	22	6	19	25
17	Louise Gardens	111 N. Louise St.	Multi-Family	63	DU	419	6	26	32	25	14	39
18		118 S. Kenwood St.	Multi-Family	35	DU	233	4	14	18	14	8	22
19		128-132 S. Kenwood St.	Multi-Family	28	DU	186	3	11	14	11	6	17
20	Laemmle Cinema Lofts	111 E. Wilson Ave. and 215 N. Maryland Ave.	Multi-Family	42	DU	279	4	17	21	17	9	26
			Movie Theater	9,690	Sq. Ft.	756	2	0	2	56	4	60
					Total	1,035	4	17	23	73	13	86
21	Hyatt Place Glendale	225 Wilson Ave.	Hotel	172	Room	1,534	67	48	115	59	61	120
			Restaurant	1,950	Sq. Ft.	248	12	9	21	11	8	19
					Total	1,782	79	57	136	70	69	139
22		200 S. Louise St.	Commerical Addition	3,240	Sq. Ft.	138	2	1	3	6	6	12
23	Broadway Lofts	200 E. Broadway	Multi-Family	248	DU	1,649	25	101	126	100	54	154
			Restaurant	12,585	Sq. Ft.	1,600	75	61	136	74	50	124
			Restaurant	14,057	Sq. Ft.	1,787	84	68	152	83	55	138
					Total	5,036	184	230	414	257	159	416
24		525 W. Elk Ave.	Multi-Family	71	DU	472	7	29	36	29	15	44
25		463 Salem St.	Multi-Family	10	DU	67	1	4	5	4	2	6
26	Mercedes-Benz Dealership	622 S. Brand Blvd	Car Dealership	41,000	Sq. Ft.	1,324	59	20	79	43	64	107
27	Star Ford Dealership	1101 S. Brand Blvd	Car Dealership	47,977	Sq. Ft.	1,550	69	23	92	50	76	126
28		124 W. Colorado St.	Multi-Family	50	DU	333	5	21	26	20	11	31

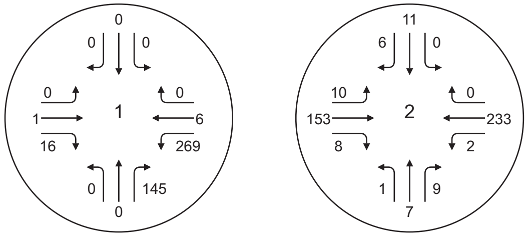
Notes:

The related projects list was provided by City of Glendale Department of Public Works, Engineering Division/Traffic.

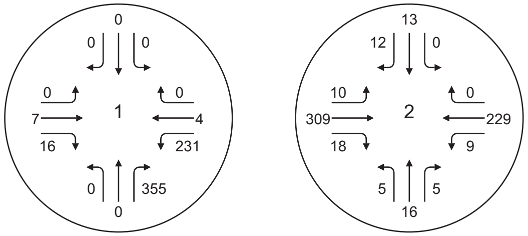
The trip generation was based on Institute of Transportation Engineers *Trip Generation Manual*, 9th Edition.

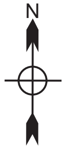


AM PEAK HOUR



PM PEAK HOUR





Legend

🟧	Project Site Location
#	Study Intersection and Reference Number
XXX↓	Intersection Turn Volume

10/01/13

KOA CORPORATION
PLANNING & ENGINEERING

507-525 W. Colorado Street Mixed-Use Project, Glendale

Figure E

Related Projects Traffic Volumes - AM and PM Peak Hour

ATTACHMENT F

FUTURE WITHOUT-PROJECT INTERSECTION LEVEL OF SERVICE WORKSHEETS

```
--------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                      Future Pre-Project Conditions
                              AM Peak  Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.573
Loss Time (sec):       10              Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         38              Level Of Service:                  A
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext            Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Protected        Protected
Rights:             Ovl             Include          Ignore           Include
Min. Green:     0     0     0     0     0     0     0     0     0     0     0     0
Y+R:          4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:        0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0     0   830     0     0    43     7    87   415  1128   147    16
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    0     0   830     0     0    43     7    87   415  1128   147    16
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0     0   830     0     0    43     7    87   415  1128   147    16
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Volume:     0     0   830     0     0    43     7    87     0  1128   147    16
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0     0   830     0     0    43     7    87     0  1128   147    16
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
FinalVolume:    0     0   830     0     0    43     7    87     0  1128   147    16
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.90  1.00  1.00
Lanes:       0.00  0.00  2.00  0.00  0.00  1.00  1.00  1.00  1.00  2.00  0.90  0.10
Final Sat.:     0     0  3200     0     0  1600  1600  1600  1600  2880  1443   157
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.26  0.00  0.00  0.03  0.00  0.05  0.00  0.39  0.10  0.10
OvlAdjV/S:               0.00
Crit Moves:  ****                          ****        ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                      Future Pre-Project Conditions
                              AM Peak  Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.848
Loss Time (sec):       10              Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         79              Level Of Service:                  D
********************************************************************************
Street Name:              Pacific Ave                      Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected      Prot+Permit      Prot+Permit
Rights:            Include           Ovl            Include          Include
Min. Green:     0     0     0     0     0     0     0     0     0     0     0     0
Y+R:          4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:        1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     116   291    66    54   472   266   142   723    55    73   898    35
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:  116   291    66    54   472   266   142   723    55    73   898    35
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  116   291    66    54   472   266   142   723    55    73   898    35
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   116   291    66    54   472   266   142   723    55    73   898    35
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  116   291    66    54   472   266   142   723    55    73   898    35
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:  116   291    66    54   472   266   142   723    55    73   898    35
OvlAdjVol:                                    124
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.63  0.37  1.00  1.00  1.00  1.00  1.86  0.14  1.00  1.92  0.08
Final Sat.:  1600  2608   592  1600  1600  1600  1600  2974   226  1600  3080   120
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07  0.11  0.11  0.03  0.30  0.17  0.09  0.24  0.24  0.05  0.29  0.29
OvlAdjV/S:                                   0.08
Crit Moves:  ****                    ****        ****                    ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                        Future Pre-Project Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.654
Loss Time (sec):      10               Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        45               Level Of Service:                  B
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext             Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted         Permitted        Protected        Protected
Rights:            Ovl             Include          Ignore           Include
Min. Green:    0     0     0     0     0     0     0     0     0     0     0     0
Y+R:         4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0
Lanes:        0  0  0  0  2    0  0  0  0  1    1  0  1  0  1    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0     0  1473     0     0    21     8   150   492  1265   180    22
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   0     0  1473     0     0    21     8   150   492  1265   180    22
Added Vol:     0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:   0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   0     0  1473     0     0    21     8   150   492  1265   180    22
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Volume:    0     0  1473     0     0    21     8   150     0  1265   180    22
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   0     0  1473     0     0    21     8   150     0  1265   180    22
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
FinalVolume:   0     0  1473     0     0    21     8   150     0  1265   180    22
OvlAdjVol:                67
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.90  1.00  1.00
Lanes:       0.00  0.00  2.00  0.00  0.00  1.00  1.00  1.00  1.00  2.00  0.89  0.11
Final Sat.:    0     0  3200     0     0  1600  1600  1600  1600  2880  1426   174
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.46  0.00  0.00  0.01  0.01  0.09  0.00  0.44  0.13  0.13
OvlAdjV/S:                0.02
Crit Moves:               ****  ****                    ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                        Future Pre-Project Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.903
Loss Time (sec):      10               Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       101               Level Of Service:                  E
********************************************************************************
Street Name:                Pacific Ave                      Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:          Include            Ovl            Include          Include
Min. Green:    0     0     0     0     0     0     0     0     0     0     0     0
Y+R:         4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0
Lanes:        1  0  1  1  0    1  0  1  0  1    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    113   389    92   126   365   205   190  1209   103    77  1123   109
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse: 113   389    92   126   365   205   190  1209   103    77  1123   109
Added Vol:     0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:   0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut: 113   389    92   126   365   205   190  1209   103    77  1123   109
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:  113   389    92   126   365   205   190  1209   103    77  1123   109
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol: 113   389    92   126   365   205   190  1209   103    77  1123   109
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume: 113   389    92   126   365   205   190  1209   103    77  1123   109
OvlAdjVol:                                  15
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.62  0.38  1.00  1.00  1.00  1.00  1.84  0.16  1.00  1.82  0.18
Final Sat.:  1600  2588   612  1600  1600  1600  1600  2949   251  1600  2917   283
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07  0.15  0.15  0.08  0.23  0.13  0.12  0.41  0.41  0.05  0.38  0.39
OvlAdjV/S:                                  0.01
Crit Moves:  ****                    ****  ****                               ****
********************************************************************************
```

ATTACHMENT G

FUTURE WITH-PROJECT INTERSECTION LEVEL OF SERVICE WORKSHEETS

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                    Future Post-Project Conditions (Scen 1)
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):        100                 Critical Vol./Cap.(X):         0.575
Loss Time (sec):      10                Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        38                Level Of Service:                  A
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext               Colorado St
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted       Protected        Protected
Rights:            Ovl             Include           Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:         0  0  0  0  2    0  0  0  0  1    1  0  1  0  1    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0   831     0    0    43     7   87   415  1133  147    16
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0   831     0    0    43     7   87   415  1133  147    16
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0   831     0    0    43     7   87   415  1133  147    16
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0    0   831     0    0    43     7   87     0  1133  147    16
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0   831     0    0    43     7   87     0  1133  147    16
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:    0    0   831     0    0    43     7   87     0  1133  147    16
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.90 1.00  1.00
Lanes:       0.00 0.00  2.00  0.00 0.00  1.00  1.00 1.00  1.00  2.00 0.90  0.10
Final Sat.:     0    0  3200     0    0  1600  1600 1600  1600  2880 1443   157
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.26  0.00 0.00  0.03  0.00 0.05  0.00  0.39 0.10  0.10
OvlAdjV/S:              0.00
Crit Moves:  ****                        ****       ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                    Future Post-Project Conditions (Scen 1)
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):        100                 Critical Vol./Cap.(X):         0.849
Loss Time (sec):      10                Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80                Level Of Service:                  D
********************************************************************************
Street Name:           Pacific Ave                       Colorado St
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:           Include            Ovl            Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:         1  0  1  1  0    1  0  1  0  1    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     116  291    66    54  472   266   143  726    55    73  899    35
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  116  291    66    54  472   266   143  726    55    73  899    35
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  116  291    66    54  472   266   143  726    55    73  899    35
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   116  291    66    54  472   266   143  726    55    73  899    35
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  116  291    66    54  472   266   143  726    55    73  899    35
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  116  291    66    54  472   266   143  726    55    73  899    35
OvlAdjVol:                                123
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.63  0.37  1.00 1.00  1.00  1.00 1.86  0.14  1.00 1.93  0.07
Final Sat.:  1600 2608   592  1600 1600  1600  1600 2975   225  1600 3080   120
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.11  0.11  0.03 0.30  0.17  0.09 0.24  0.24  0.05 0.29  0.29
OvlAdjV/S:                               0.08
Crit Moves:  ****                  ****        ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                   Future Post-Project Conditions (Scen 1)
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.657
Loss Time (sec):      10              Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        45              Level Of Service:                 B
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext           Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:            Ovl            Include          Ignore           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0  1479    0    0    21    8  151   492 1271  181    22
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0  1479    0    0    21    8  151   492 1271  181    22
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0  1479    0    0    21    8  151   492 1271  181    22
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Volume:    0    0  1479    0    0    21    8  151     0 1271  181    22
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0  1479    0    0    21    8  151     0 1271  181    22
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
FinalVolume:   0    0  1479    0    0    21    8  151     0 1271  181    22
OvlAdjVol:                67
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.90 1.00  1.00
Lanes:       0.00 0.00  2.00 0.00 0.00  1.00 1.00 1.00  1.00 2.00 0.89  0.11
Final Sat.:    0    0  3200    0    0  1600 1600 1600  1600 2880 1427   173
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.46 0.00 0.00  0.01 0.01 0.09  0.00 0.44 0.13  0.13
OvlAdjV/S:              0.02
Crit Moves:             **** ****                  ****       ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                  507-525 W. Colorado St Mixed Use Project
                   Future Post-Project Conditions (Scen 1)
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.905
Loss Time (sec):      10              Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       103              Level Of Service:                 E
********************************************************************************
Street Name:            Pacific Ave                      Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:          Include            Ovl            Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    114  389    92  126  365   206  191 1212   104   77 1127   109
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse: 114  389    92  126  365   206  191 1212   104   77 1127   109
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut: 114  389    92  126  365   206  191 1212   104   77 1127   109
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:  114  389    92  126  365   206  191 1212   104   77 1127   109
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol: 114  389    92  126  365   206  191 1212   104   77 1127   109
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
FinalVolume: 114  389    92  126  365   206  191 1212   104   77 1127   109
OvlAdjVol:                                 15
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:       1.00 1.62  0.38 1.00 1.00  1.00 1.00 1.84  0.16 1.00 1.82  0.18
Final Sat.:  1600 2588   612 1600 1600  1600 1600 2947   253 1600 2918   282
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.15  0.15 0.08 0.23  0.13 0.12 0.41  0.41 0.05 0.39  0.39
OvlAdjV/S:                              0.01
Crit Moves:  ****                 ****       ****                  ****
********************************************************************************
```

ATTACHMENT H

PROJECT ACCESS ALTERNATIVE EXISTING WITH-PROJECT INTERSECTION LEVEL OF SERVICE WORKSHEETS

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                    Existing + Project Conditions (Scen 2)
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap.(X):         0.473
Loss Time (sec):     10               Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       32               Level Of Service:                  A
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext           Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:            Ovl            Include          Ignore           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0   673    0    0    42    7   84   391  847  138    20
Growth Adj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0   673    0    0    42    7   84   391  847  138    20
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0   673    0    0    42    7   84   391  847  138    20
User Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Volume:    0    0   673    0    0    42    7   84     0  847  138    20
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0   673    0    0    42    7   84     0  847  138    20
PCE Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
FinalVolume:   0    0   673    0    0    42    7   84     0  847  138    20
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.90 1.00  1.00
Lanes:      0.00 0.00  2.00 0.00 0.00  1.00 1.00 1.00  1.00 2.00 0.87  0.13
Final Sat.:    0    0  3200    0    0  1600 1600 1600  1600 2880 1397   203
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.00  0.21 0.00 0.00  0.03 0.00 0.05  0.00 0.29 0.10  0.10
OvlAdjV/S:             0.00
Crit Moves: ****                        ****      ****       ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                    Existing + Project Conditions (Scen 2)
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap.(X):         0.748
Loss Time (sec):     10               Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       57               Level Of Service:                  C
********************************************************************************
Street Name:             Pacific Ave                      Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:          Include            Ovl            Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    113  278    56   56  452   255  129  559    46   70  653    34
Growth Adj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse: 113  278    56   56  452   255  129  559    46   70  653    34
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut: 113  278    56   56  452   255  129  559    46   70  653    34
User Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:  113  278    56   56  452   255  129  559    46   70  653    34
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol: 113  278    56   56  452   255  129  559    46   70  653    34
PCE Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
FinalVolume: 113  278    56   56  452   255  129  559    46   70  653    34
OvlAdjVol:                                126
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:      1.00 1.66  0.34 1.00 1.00  1.00 1.00 1.85  0.15 1.00 1.90  0.10
Final Sat.: 1600 2663   537 1600 1600  1600 1600 2957   243 1600 3042   158
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.07 0.10  0.10 0.04 0.28  0.16 0.08 0.19  0.19 0.04 0.21  0.21
OvlAdjV/S:                              0.08
Crit Moves: ****                  ****      ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                    Existing + Project Conditions (Scen 2)
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.555
Loss Time (sec):      10                Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        37                Level Of Service:                  A
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext               Colorado St
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Protected        Protected
Rights:            Ovl             Include          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:        0  0  0  0  2    0  0  0  0  1    1  0  1  0  1    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0  1102     0    0    21     8  141   467  1020  174    27
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0  1102     0    0    21     8  141   467  1020  174    27
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0  1102     0    0    21     8  141   467  1020  174    27
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0    0  1102     0    0    21     8  141     0  1020  174    27
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0  1102     0    0    21     8  141     0  1020  174    27
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:    0    0  1102     0    0    21     8  141     0  1020  174    27
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.90 1.00  1.00
Lanes:       0.00 0.00  2.00  0.00 0.00  1.00  1.00 1.00  1.00  2.00 0.87  0.13
Final Sat.:     0    0  3200     0    0  1600  1600 1600  1600  2880 1385   215
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.34  0.00 0.00  0.01  0.01 0.09  0.00  0.35 0.13  0.13
OvlAdjV/S:              0.00
Crit Moves:  ****                        ****       ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                   507-525 W. Colorado St Mixed Use Project
                    Existing + Project Conditions (Scen 2)
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.802
Loss Time (sec):      10                Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        67                Level Of Service:                  D
********************************************************************************
Street Name:           Pacific Ave                       Colorado St
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:           Include           Ovl             Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
Lanes:        1  0  1  1  0    1  0  1  0  1    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     107  366    85   127  346   190   176  882    83    67  880   107
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  107  366    85   127  346   190   176  882    83    67  880   107
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  107  366    85   127  346   190   176  882    83    67  880   107
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   107  366    85   127  346   190   176  882    83    67  880   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  107  366    85   127  346   190   176  882    83    67  880   107
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  107  366    85   127  346   190   176  882    83    67  880   107
OvlAdjVol:                                 14
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.62  0.38  1.00 1.00  1.00  1.00 1.83  0.17  1.00 1.78  0.22
Final Sat.:  1600 2597   603  1600 1600  1600  1600 2925   275  1600 2853   347
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.14  0.14  0.08 0.22  0.12  0.11 0.30  0.30  0.04 0.31  0.31
OvlAdjV/S:                               0.01
Crit Moves:  ****                  ****        ****                  ****
********************************************************************************
```

ATTACHMENT I

PROJECT ACCESS ALTERNATIVE FUTURE WITH-PROJECT INTERSECTION LEVEL OF SERVICE WORKSHEETS

```
-------------------------------------------------------------------------------
                 507-525 W. Colorado St Mixed Use Project
                  Future Post-Project Conditions (Scen 2)
                              AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap.(X):        0.575
Loss Time (sec):     10               Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       38               Level Of Service:                 A
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext             Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:            Ovl            Include          Ignore           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0   831    0    0    43    7   87   415 1133  147    20
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0   831    0    0    43    7   87   415 1133  147    20
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0   831    0    0    43    7   87   415 1133  147    20
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Volume:    0    0   831    0    0    43    7   87     0 1133  147    20
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0   831    0    0    43    7   87     0 1133  147    20
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
FinalVolume:   0    0   831    0    0    43    7   87     0 1133  147    20
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.90 1.00  1.00
Lanes:       0.00 0.00  2.00 0.00 0.00  1.00 1.00 1.00  1.00 2.00 0.88  0.12
Final Sat.:     0    0  3200    0    0  1600 1600 1600  1600 2880 1408   192
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.26 0.00 0.00  0.03 0.00 0.05  0.00 0.39 0.10  0.10
OvlAdjV/S:              0.00
Crit Moves:  ****                       ****      ****       ****
********************************************************************************
```

```
-------------------------------------------------------------------------------
                 507-525 W. Colorado St Mixed Use Project
                  Future Post-Project Conditions (Scen 2)
                              AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap.(X):        0.848
Loss Time (sec):     10               Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       79               Level Of Service:                 D
********************************************************************************
Street Name:              Pacific Ave                     Colorado St
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit      Prot+Permit
Rights:          Include            Ovl            Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Y+R:         4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:       1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    116  291    66   57  472   266  142  723    55   73  899    35
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse: 116  291    66   57  472   266  142  723    55   73  899    35
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut: 116  291    66   57  472   266  142  723    55   73  899    35
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:  116  291    66   57  472   266  142  723    55   73  899    35
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol: 116  291    66   57  472   266  142  723    55   73  899    35
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
FinalVolume: 116  291    66   57  472   266  142  723    55   73  899    35
OvlAdjVol:                                124
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:       1.00 1.63  0.37 1.00 1.00  1.00 1.00 1.86  0.14 1.00 1.93  0.07
Final Sat.:  1600 2608   592 1600 1600  1600 1600 2974   226 1600 3080   120
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.11  0.11 0.04 0.30  0.17 0.09 0.24  0.24 0.05 0.29  0.29
OvlAdjV/S:                              0.08
Crit Moves:  ****                  ****      ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                507-525 W. Colorado St Mixed Use Project
                 Future Post-Project Conditions (Scen 2)
                              PM Peak Hour
--------------------------------------------------------------------------------
                   Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Kenilworth Av/I-5 Ramp Ext & Colorado St
********************************************************************************
Cycle (sec):        100             Critical Vol./Cap.(X):        0.657
Loss Time (sec):     10             Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       45             Level Of Service:                 B
********************************************************************************
Street Name:    Kenilworth Av/I-5 Ramp Ext            Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Protected        Protected
Rights:             Ovl            Include          Ignore           Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Y+R:          4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:        0  0  0  0  2   0  0  0  0  1   1  0  1  0  1   2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0  1479    0    0    21    8  151   492 1271  181    27
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0  1479    0    0    21    8  151   492 1271  181    27
Added Vol:      0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0  1479    0    0    21    8  151   492 1271  181    27
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Volume:     0    0  1479    0    0    21    8  151     0 1271  181    27
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0  1479    0    0    21    8  151     0 1271  181    27
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
FinalVolume:    0    0  1479    0    0    21    8  151     0 1271  181    27
OvlAdjVol:                67
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.90 1.00  1.00
Lanes:       0.00 0.00  2.00 0.00 0.00  1.00 1.00 1.00  1.00 2.00 0.87  0.13
Final Sat.:     0    0  3200    0    0  1600 1600 1600  1600 2880 1392   208
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.46 0.00 0.00  0.01 0.01 0.09  0.00 0.44 0.13  0.13
OvlAdjV/S:              0.02
Crit Moves:             ****  ****                ****       ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                507-525 W. Colorado St Mixed Use Project
                 Future Post-Project Conditions (Scen 2)
                              PM Peak Hour
--------------------------------------------------------------------------------
                   Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Pacific Ave & Colorado St
********************************************************************************
Cycle (sec):        100             Critical Vol./Cap.(X):        0.905
Loss Time (sec):     10             Average Delay (sec/veh):     xxxxxx
Optimal Cycle:      103             Level Of Service:                 E
********************************************************************************
Street Name:            Pacific Ave                       Colorado St
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected       Prot+Permit      Prot+Permit
Rights:           Include            Ovl            Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Y+R:          4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0  4.0  4.0   4.0
Lanes:        1  0  1  1  0   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     114  389    92  129  366   206  190 1209   103   77 1127   109
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  114  389    92  129  366   206  190 1209   103   77 1127   109
Added Vol:      0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:  114  389    92  129  366   206  190 1209   103   77 1127   109
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   114  389    92  129  366   206  190 1209   103   77 1127   109
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  114  389    92  129  366   206  190 1209   103   77 1127   109
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
FinalVolume:  114  389    92  129  366   206  190 1209   103   77 1127   109
OvlAdjVol:                                16
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:       1.00 1.62  0.38 1.00 1.00  1.00 1.00 1.84  0.16 1.00 1.82  0.18
Final Sat.:  1600 2588   612 1600 1600  1600 1600 2949   251 1600 2918   282
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.15  0.15 0.08 0.23  0.13 0.12 0.41  0.41 0.05 0.39  0.39
OvlAdjV/S:                              0.01
Crit Moves:  ****                 ****  ****                      ****
********************************************************************************
```

ATTACHMENT J

COLORADO STREET LEFT-TURN QUEUE ANALYSIS WORKSHEETS

	↗	→	↙	←	↖	↑	↘	↓	↙
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	155	849	79	1015	126	388	59	513	289
v/c Ratio	0.84	0.69	0.40	0.84	0.97	0.41	0.38	0.94	0.78
Control Delay	53.9	24.2	18.2	30.6	110.7	20.7	39.4	54.7	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.9	24.2	18.2	30.6	110.7	20.7	39.4	54.7	21.3
Queue Length 50th (ft)	42	173	20	224	60	67	26	231	0
Queue Length 95th (ft)	#121	235	44	#330	#162	106	62	#417	#105
Internal Link Dist (ft)		151		661		529		706	
Turn Bay Length (ft)	100		105		80		105		
Base Capacity (vph)	185	1238	198	1204	130	945	157	544	371
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.69	0.40	0.84	0.97	0.41	0.38	0.94	0.78

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

507-525 W Colorado St Mixed-Use Project
Scenario 1: Future with Project

PM Peak Hour
Pacific Ave. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	208	1430	84	1343	124	523	137	397	224
v/c Ratio	0.91	0.88	0.55	0.95	0.86	0.77	0.73	0.96	0.61
Control Delay	60.4	30.2	25.0	40.5	88.2	40.1	62.7	71.2	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.4	30.2	25.0	40.5	88.2	40.1	62.7	71.2	13.5
Queue Length 50th (ft)	69	373	22	375	71	140	77	224	0
Queue Length 95th (ft)	#201	#490	#48	#529	#172	#200	#167	#403	67
Internal Link Dist (ft)		151		661		529		706	
Turn Bay Length (ft)	100		105		80		105		
Base Capacity (vph)	229	1619	154	1418	144	683	187	414	367
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.88	0.55	0.95	0.86	0.77	0.73	0.96	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

ATTACHMENT K

CALTRANS QUEUE ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	516	915	167	730	46
v/c Ratio	0.07	0.45	1.00	0.19	0.38	0.05
Control Delay	27.6	5.4	54.7	9.4	0.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	5.4	54.7	9.4	0.6	0.1
Queue Length 50th (ft)	3	13	170	30	0	0
Queue Length 95th (ft)	14	46	#286	61	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	118	1138	915	863	1903	999
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.45	1.00	0.19	0.38	0.05

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	660	1102	212	1191	23
v/c Ratio	0.08	0.57	0.99	0.23	0.65	0.02
Control Delay	30.6	7.4	49.9	9.1	2.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	7.4	49.9	9.1	2.1	0.0
Queue Length 50th (ft)	3	25	221	40	0	0
Queue Length 95th (ft)	16	65	#350	75	9	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	109	1154	1109	936	1844	947
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.57	0.99	0.23	0.65	0.02

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	516	921	167	732	46
v/c Ratio	0.07	0.45	1.01	0.19	0.38	0.05
Control Delay	27.6	5.4	40.6	4.3	0.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	5.4	40.6	4.3	0.6	0.1
Queue Length 50th (ft)	3	13	~88	14	0	0
Queue Length 95th (ft)	14	46	m#263	m23	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	118	1138	915	863	1939	999
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.45	1.01	0.19	0.38	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	661	1109	213	1198	23
v/c Ratio	0.08	0.57	1.00	0.23	0.65	0.02
Control Delay	30.6	7.5	51.5	9.1	2.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	7.5	51.5	9.1	2.2	0.0
Queue Length 50th (ft)	3	25	222	40	0	0
Queue Length 95th (ft)	16	65	#354	75	10	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	109	1154	1109	936	1843	945
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.57	1.00	0.23	0.65	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	546	1226	177	902	47
v/c Ratio	0.08	0.52	0.96	0.18	0.45	0.05
Control Delay	33.0	6.8	40.8	8.1	0.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	6.8	40.8	8.1	0.7	0.1
Queue Length 50th (ft)	3	17	259	33	0	0
Queue Length 95th (ft)	16	55	#395	62	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	101	1056	1275	1003	1994	974
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.52	0.96	0.18	0.45	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

	↗	→	↙	←	↗	↙
Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	698	1375	220	1601	23
v/c Ratio	0.10	0.72	0.97	0.21	0.81	0.02
Control Delay	36.1	17.1	40.7	7.9	6.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	17.1	40.7	7.9	6.4	0.0
Queue Length 50th (ft)	4	68	311	42	31	0
Queue Length 95th (ft)	18	129	#462	74	101	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	94	966	1419	1057	1976	927
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.72	0.97	0.21	0.81	0.02

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

507-525 W Colorado St Mixed-Use Project
Scenario 1: Future with Project

AM Peak Hour
Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	546	1232	177	903	47
v/c Ratio	0.08	0.52	0.97	0.18	0.45	0.05
Control Delay	33.0	6.8	41.7	8.1	0.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	6.8	41.7	8.1	0.7	0.1
Queue Length 50th (ft)	3	17	261	33	0	0
Queue Length 95th (ft)	16	55	#398	62	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	101	1056	1275	1003	1994	974
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.52	0.97	0.18	0.45	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	699	1382	221	1608	23
v/c Ratio	0.10	0.72	0.97	0.21	0.81	0.02
Control Delay	36.1	17.2	41.7	7.9	6.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	17.2	41.7	7.9	6.6	0.0
Queue Length 50th (ft)	4	68	314	42	33	0
Queue Length 95th (ft)	18	130	#465	75	107	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	94	966	1419	1057	1974	925
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.72	0.97	0.21	0.81	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

507-525 W Colorado St Mixed-Use Project
Scenario 2: Existing with Project

AM Peak Hour
Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	516	921	172	732	46
v/c Ratio	0.07	0.45	1.01	0.20	0.38	0.05
Control Delay	27.6	5.4	41.2	4.4	0.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	5.4	41.2	4.4	0.6	0.1
Queue Length 50th (ft)	3	13	~96	14	0	0
Queue Length 95th (ft)	14	46	m#264	m24	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	118	1138	915	861	1939	999
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.45	1.01	0.20	0.38	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	661	1109	218	1198	23
v/c Ratio	0.08	0.57	1.00	0.23	0.65	0.02
Control Delay	30.6	7.5	51.5	9.0	2.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	7.5	51.5	9.0	2.2	0.0
Queue Length 50th (ft)	3	25	222	41	0	0
Queue Length 95th (ft)	16	65	#354	76	10	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	109	1154	1109	935	1843	945
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.57	1.00	0.23	0.65	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	546	1232	182	903	47
v/c Ratio	0.08	0.52	0.97	0.18	0.45	0.05
Control Delay	33.0	6.8	41.7	8.0	0.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	6.8	41.7	8.0	0.7	0.1
Queue Length 50th (ft)	3	17	261	33	0	0
Queue Length 95th (ft)	16	55	#398	63	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	101	1056	1275	1000	1994	974
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.52	0.97	0.18	0.45	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	699	1382	226	1608	23
v/c Ratio	0.10	0.72	0.97	0.21	0.81	0.02
Control Delay	36.1	17.2	41.7	7.8	6.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	17.2	41.7	7.8	6.6	0.0
Queue Length 50th (ft)	4	68	314	43	33	0
Queue Length 95th (ft)	18	130	#465	75	107	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	94	966	1419	1055	1974	925
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.72	0.97	0.21	0.81	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX 5.0

Alternative Traffic Calculations

Air Quality and Greenhouse Gas Calculations

All Office Alternative

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	71.00	1000sqft	1.63	71,415.00	0
Enclosed Parking Structure	292.00	Space	2.63	116,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2016
Utility Company	Glendale Water & Power				
CO2 Intensity (lb/MWhr)	1115.33	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project specific parameters from EIR

Construction Phase - Actual construction period per project - 18 months

Off-road Equipment -

Off-road Equipment - Project specific parameters from EIR

Off-road Equipment - Project specific parameters from EIR

Off-road Equipment - Project specific parameters from EIR

Trips and VMT - Project specific parameters from EIR

Demolition -

Grading - Project site size

Architectural Coating - Project specific parameters from EIR

Area Coating -

Water And Wastewater - Project specific parameters from EIR

Solid Waste - Project specific parameters from EIR

Construction Off-road Equipment Mitigation - Project specific parameters from EIR

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	60.00
tblConstructionPhase	NumDays	230.00	250.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	8.00	100.00
tblConstructionPhase	PhaseEndDate	4/29/2016	2/4/2016
tblConstructionPhase	PhaseStartDate	2/6/2016	11/13/2015
tblConstructionPhase	PhaseStartDate	2/21/2015	2/23/2015
tblConstructionPhase	PhaseStartDate	10/4/2014	10/6/2014
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	71,000.00	71,415.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	766.80	77.00
tblTripsAndVMT	HaulingTripNumber	0.00	6,875.00
tblTripsAndVMT	VendorTripNumber	31.00	13.00
tblTripsAndVMT	WorkerTripNumber	72.00	71.00
tblWater	IndoorWaterUseRate	8,909,118.17	8,145,431.25

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					
2014	0.1185	1.3735	0.9800	2.2100e-003	0.1070	0.0563	0.1633	0.0379	0.0533	0.0912	0.0000	204.4476	204.4476	0.0116	0.0000	204.6917
2015	1.5460	2.4969	2.1751	3.9300e-003	0.1920	0.1422	0.3342	0.0611	0.1317	0.1928	0.0000	350.5897	350.5897	0.0468	0.0000	351.5725
2016	0.9372	0.2296	0.2174	3.7000e-004	0.0131	0.0150	0.0281	3.5000e-003	0.0140	0.0175	0.0000	31.7077	31.7077	5.2000e-003	0.0000	31.8169
Total	**2.6017**	**4.1000**	**3.3725**	**6.5100e-003**	**0.3121**	**0.2135**	**0.5256**	**0.1025**	**0.1990**	**0.3015**	**0.0000**	**586.7450**	**586.7450**	**0.0636**	**0.0000**	**588.0812**

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					
2014	0.0645	1.0870	0.9406	2.2100e-003	0.0777	0.0330	0.1107	0.0243	0.0318	0.0561	0.0000	204.4475	204.4475	0.0116	0.0000	204.6917
2015	1.3870	1.4383	2.1167	3.9300e-003	0.1668	0.0624	0.2292	0.0481	0.0616	0.1097	0.0000	350.5895	350.5895	0.0468	0.0000	351.5723
2016	0.9190	0.1180	0.2130	3.7000e-004	0.0131	6.5300e-003	0.0196	3.5000e-003	6.5000e-003	0.0100	0.0000	31.7077	31.7077	5.2000e-003	0.0000	31.8169
Total	**2.3705**	**2.6434**	**3.2703**	**6.5100e-003**	**0.2576**	**0.1020**	**0.3596**	**0.0759**	**0.0999**	**0.1758**	**0.0000**	**586.7448**	**586.7448**	**0.0636**	**0.0000**	**588.0809**

	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	**8.89**	**35.53**	**3.03**	**0.00**	**17.46**	**52.25**	**31.59**	**25.88**	**49.82**	**41.69**	**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	0.8987	5.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0100e-003	9.0100e-003	3.0000e-005	0.0000	9.5400e-003
Energy	4.2100e-003	0.0383	0.0321	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	953.6492	953.6492	0.0245	5.6700e-003	955.9216
Mobile	1.2158	3.3272	13.0801	0.0281	1.9055	0.0441	1.9496	0.5099	0.0405	0.5504	0.0000	2,237.9818	2,237.9818	0.0933	0.0000	2,239.9416
Waste						0.0000	0.0000		0.0000	0.0000	15.6303	0.0000	15.6303	0.9237	0.0000	35.0285
Water						0.0000	0.0000		0.0000	0.0000	2.5842	63.1952	65.7793	0.2671	6.6100e-003	73.4358
Total	**2.1187**	**3.3655**	**13.1170**	**0.0283**	**1.9055**	**0.0470**	**1.9525**	**0.5099**	**0.0435**	**0.5533**	**18.2145**	**3,254.8352**	**3,273.0497**	**1.3086**	**0.0123**	**3,304.3371**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8987	5.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0100e-003	9.0100e-003	3.0000e-005	0.0000	9.5400e-003
Energy	3.6000e-003	0.0327	0.0275	2.0000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003	0.0000	882.4224	882.4224	0.0227	5.2100e-003	884.5137
Mobile	1.1180	2.5738	10.6506	0.0207	1.3896	0.0329	1.4225	0.3718	0.0303	0.4021	0.0000	1,651.6411	1,651.6411	0.0707	0.0000	1,653.1263
Waste						0.0000	0.0000		0.0000	0.0000	7.8152	0.0000	7.8152	0.4619	0.0000	17.5143
Water						0.0000	0.0000		0.0000	0.0000	2.5842	59.4252	62.0094	0.2670	6.5900e-003	69.6575
Total	**2.0203**	**2.6066**	**10.6829**	**0.0209**	**1.3896**	**0.0355**	**1.4250**	**0.3718**	**0.0328**	**0.4046**	**10.3993**	**2,593.4977**	**2,603.8970**	**0.8223**	**0.0118**	**2,624.8213**

	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	**4.65**	**22.55**	**18.56**	**26.06**	**27.08**	**24.61**	**27.02**	**27.08**	**24.55**	**26.88**	**42.91**	**20.32**	**20.44**	**37.17**	**3.91**	**20.56**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2014	10/3/2014	5	25	
2	Grading	Grading	10/6/2014	2/20/2015	5	100	
3	Building Construction	Building Construction	2/23/2015	2/5/2016	5	250	
4	Architectural Coating	Architectural Coating	11/13/2015	2/4/2016	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 282,323; Non-Residential Outdoor: 94,108 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8000e-003	0.0000	6.8000e-003	1.0300e-003	0.0000	1.0300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.1562	0.1107	1.5000e-004		0.0116	0.0116		0.0111	0.0111	0.0000	13.6900	13.6900	2.8500e-003	0.0000	13.7498
Total	**0.0187**	**0.1562**	**0.1107**	**1.5000e-004**	**6.8000e-003**	**0.0116**	**0.0184**	**1.0300e-003**	**0.0111**	**0.0122**	**0.0000**	**13.6900**	**13.6900**	**2.8500e-003**	**0.0000**	**13.7498**

3.2 Demolition - 2014

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	7.3000e-004	0.0118	7.9900e-003	2.0000e-005	5.4000e-004	2.2000e-004	7.6000e-004	1.5000e-004	2.0000e-004	3.5000e-004	0.0000	2.1709	2.1709	2.0000e-005	0.0000	2.1713
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	6.2000e-004	9.1000e-004	9.4400e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3752	1.3752	8.0000e-005	0.0000	1.3769
Total	**1.3500e-003**	**0.0127**	**0.0174**	**4.0000e-005**	**1.9100e-003**	**2.3000e-004**	**2.1400e-003**	**5.1000e-004**	**2.1000e-004**	**7.3000e-004**	**0.0000**	**3.5461**	**3.5461**	**1.0000e-004**	**0.0000**	**3.5482**

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					2.6500e-003	0.0000	2.6500e-003	4.0000e-004	0.0000	4.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3300e-003	0.0748	0.0995	1.5000e-004		5.0300e-003	5.0300e-003		5.0300e-003	5.0300e-003	0.0000	13.6899	13.6899	2.8500e-003	0.0000	13.7498
Total	**3.3300e-003**	**0.0748**	**0.0995**	**1.5000e-004**	**2.6500e-003**	**5.0300e-003**	**7.6800e-003**	**4.0000e-004**	**5.0300e-003**	**5.4300e-003**	**0.0000**	**13.6899**	**13.6899**	**2.8500e-003**	**0.0000**	**13.7498**

3.2 Demolition - 2014

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	7.3000e-004	0.0118	7.9900e-003	2.0000e-005	5.4000e-004	2.2000e-004	7.6000e-004	1.5000e-004	2.0000e-004	3.5000e-004	0.0000	2.1709	2.1709	2.0000e-005	0.0000	2.1713
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	6.2000e-004	9.1000e-004	9.4400e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3752	1.3752	8.0000e-005	0.0000	1.3769
Total	**1.3500e-003**	**0.0127**	**0.0174**	**4.0000e-005**	**1.9100e-003**	**2.3000e-004**	**2.1400e-003**	**5.1000e-004**	**2.1000e-004**	**7.3000e-004**	**0.0000**	**3.5461**	**3.5461**	**1.0000e-004**	**0.0000**	**3.5482**

3.3 Grading - 2014

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					0.0413	0.0000	0.0413	0.0212	0.0000	0.0212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0470	0.3935	0.2789	3.8000e-004		0.0293	0.0293		0.0281	0.0281	0.0000	34.4987	34.4987	7.1900e-003	0.0000	34.6496
Total	**0.0470**	**0.3935**	**0.2789**	**3.8000e-004**	**0.0413**	**0.0293**	**0.0706**	**0.0212**	**0.0281**	**0.0493**	**0.0000**	**34.4987**	**34.4987**	**7.1900e-003**	**0.0000**	**34.6496**

3.3 Grading - 2014

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	0.0499	0.8089	0.5493	1.6000e-003	0.0536	0.0151	0.0686	0.0142	0.0139	0.0281	0.0000	149.2475	149.2475	1.2800e-003	0.0000	149.2744
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	1.5700e-003	2.3000e-003	0.0238	4.0000e-005	3.4600e-003	3.0000e-005	3.4900e-003	9.2000e-004	3.0000e-005	9.5000e-004	0.0000	3.4655	3.4655	2.1000e-004	0.0000	3.4698
Total	**0.0514**	**0.8112**	**0.5730**	**1.6400e-003**	**0.0570**	**0.0151**	**0.0721**	**0.0151**	**0.0139**	**0.0290**	**0.0000**	**152.7129**	**152.7129**	**1.4900e-003**	**0.0000**	**152.7442**

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					0.0161	0.0000	0.0161	8.2700e-003	0.0000	8.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3800e-003	0.1884	0.2506	3.8000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	34.4986	34.4986	7.1900e-003	0.0000	34.6496
Total	**8.3800e-003**	**0.1884**	**0.2506**	**3.8000e-004**	**0.0161**	**0.0127**	**0.0288**	**8.2700e-003**	**0.0127**	**0.0209**	**0.0000**	**34.4986**	**34.4986**	**7.1900e-003**	**0.0000**	**34.6496**

3.3 Grading - 2014

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	0.0499	0.8089	0.5493	1.6000e-003	0.0536	0.0151	0.0686	0.0142	0.0139	0.0281	0.0000	149.2475	149.2475	1.2800e-003	0.0000	149.2744
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	1.5700e-003	2.3000e-003	0.0238	4.0000e-005	3.4600e-003	3.0000e-005	3.4900e-003	9.2000e-004	3.0000e-005	9.5000e-004	0.0000	3.4655	3.4655	2.1000e-004	0.0000	3.4698
Total	**0.0514**	**0.8112**	**0.5730**	**1.6400e-003**	**0.0570**	**0.0151**	**0.0721**	**0.0151**	**0.0139**	**0.0290**	**0.0000**	**152.7129**	**152.7129**	**1.4900e-003**	**0.0000**	**152.7442**

3.3 Grading - 2015

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					0.0413	0.0000	0.0413	0.0212	0.0000	0.0212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0261	0.2209	0.1631	2.2000e-004		0.0162	0.0162		0.0155	0.0155	0.0000	20.1502	20.1502	4.1100e-003	0.0000	20.2366
Total	**0.0261**	**0.2209**	**0.1631**	**2.2000e-004**	**0.0413**	**0.0162**	**0.0575**	**0.0212**	**0.0155**	**0.0367**	**0.0000**	**20.1502**	**20.1502**	**4.1100e-003**	**0.0000**	**20.2366**

3.3 Grading - 2015

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	0.0257	0.4169	0.2976	9.4000e-004	0.0498	6.9000e-003	0.0567	0.0129	6.3500e-003	0.0192	0.0000	86.6314	86.6314	6.8000e-004	0.0000	86.6457
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	8.3000e-004	1.2100e-003	0.0126	2.0000e-005	2.0300e-003	2.0000e-005	2.0500e-003	5.4000e-004	2.0000e-005	5.6000e-004	0.0000	1.9696	1.9696	1.1000e-004	0.0000	1.9720
Total	**0.0265**	**0.4182**	**0.3101**	**9.6000e-004**	**0.0519**	**6.9200e-003**	**0.0588**	**0.0134**	**6.3700e-003**	**0.0198**	**0.0000**	**88.6010**	**88.6010**	**7.9000e-004**	**0.0000**	**88.6177**

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					0.0161	0.0000	0.0161	8.2700e-003	0.0000	8.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9200e-003	0.1106	0.1472	2.2000e-004		7.4400e-003	7.4400e-003		7.4400e-003	7.4400e-003	0.0000	20.1502	20.1502	4.1100e-003	0.0000	20.2366
Total	**4.9200e-003**	**0.1106**	**0.1472**	**2.2000e-004**	**0.0161**	**7.4400e-003**	**0.0235**	**8.2700e-003**	**7.4400e-003**	**0.0157**	**0.0000**	**20.1502**	**20.1502**	**4.1100e-003**	**0.0000**	**20.2366**

3.3 Grading - 2015

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	0.0257	0.4169	0.2976	9.4000e-004	0.0498	6.9000e-003	0.0567	0.0129	6.3500e-003	0.0192	0.0000	86.6314	86.6314	6.8000e-004	0.0000	86.6457
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	8.3000e-004	1.2100e-003	0.0126	2.0000e-005	2.0300e-003	2.0000e-005	2.0500e-003	5.4000e-004	2.0000e-005	5.6000e-004	0.0000	1.9696	1.9696	1.1000e-004	0.0000	1.9720
Total	**0.0265**	**0.4182**	**0.3101**	**9.6000e-004**	**0.0519**	**6.9200e-003**	**0.0588**	**0.0134**	**6.3700e-003**	**0.0198**	**0.0000**	**88.6010**	**88.6010**	**7.9000e-004**	**0.0000**	**88.6177**

3.4 Building Construction - 2015

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	0.1628	1.6103	0.9294	1.2700e-003		0.1119	0.1119		0.1030	0.1030	0.0000	121.0825	121.0825	0.0362	0.0000	121.8416
Total	**0.1628**	**1.6103**	**0.9294**	**1.2700e-003**		**0.1119**	**0.1119**		**0.1030**	**0.1030**	**0.0000**	**121.0825**	**121.0825**	**0.0362**	**0.0000**	**121.8416**

3.4 Building Construction - 2015

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	0.0146	0.1489	0.1823	3.2000e-004	8.9600e-003	2.5000e-003	0.0115	2.5600e-003	2.3000e-003	4.8600e-003	0.0000	29.0172	29.0172	2.3000e-004	0.0000	29.0221
Worker	0.0355	0.0521	0.5403	1.0700e-003	0.0872	7.8000e-004	0.0880	0.0232	7.2000e-004	0.0239	0.0000	84.6621	84.6621	4.7800e-003	0.0000	84.7626
Total	**0.0502**	**0.2010**	**0.7226**	**1.3900e-003**	**0.0962**	**3.2800e-003**	**0.0995**	**0.0257**	**3.0200e-003**	**0.0288**	**0.0000**	**113.6793**	**113.6793**	**5.0100e-003**	**0.0000**	**113.7846**

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	0.0311	0.6832	0.8881	1.2700e-003		0.0431	0.0431		0.0431	0.0431	0.0000	121.0824	121.0824	0.0362	0.0000	121.8415
Total	**0.0311**	**0.6832**	**0.8881**	**1.2700e-003**		**0.0431**	**0.0431**		**0.0431**	**0.0431**	**0.0000**	**121.0824**	**121.0824**	**0.0362**	**0.0000**	**121.8415**

3.4 Building Construction - 2015

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	0.0146	0.1489	0.1823	3.2000e-004	8.9600e-003	2.5000e-003	0.0115	2.5600e-003	2.3000e-003	4.8600e-003	0.0000	29.0172	29.0172	2.3000e-004	0.0000	29.0221
Worker	0.0355	0.0521	0.5403	1.0700e-003	0.0872	7.8000e-004	0.0880	0.0232	7.2000e-004	0.0239	0.0000	84.6621	84.6621	4.7800e-003	0.0000	84.7626
Total	**0.0502**	**0.2010**	**0.7226**	**1.3900e-003**	**0.0962**	**3.2800e-003**	**0.0995**	**0.0257**	**3.0200e-003**	**0.0288**	**0.0000**	**113.6793**	**113.6793**	**5.0100e-003**	**0.0000**	**113.7846**

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	0.0180	0.1782	0.1068	1.5000e-004		0.0122	0.0122		0.0112	0.0112	0.0000	13.8992	13.8992	4.1900e-003	0.0000	13.9872
Total	**0.0180**	**0.1782**	**0.1068**	**1.5000e-004**		**0.0122**	**0.0122**		**0.0112**	**0.0112**	**0.0000**	**13.8992**	**13.8992**	**4.1900e-003**	**0.0000**	**13.9872**

3.4 Building Construction - 2016

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	1.5000e-003	0.0153	0.0197	4.0000e-005	1.0400e-003	2.4000e-004	1.2800e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.3309	3.3309	2.0000e-005	0.0000	3.3314
Worker	3.7100e-003	5.4500e-003	0.0566	1.2000e-004	0.0101	9.0000e-005	0.0102	2.6900e-003	8.0000e-005	2.7700e-003	0.0000	9.4873	9.4873	5.1000e-004	0.0000	9.4980
Total	**5.2100e-003**	**0.0207**	**0.0763**	**1.6000e-004**	**0.0112**	**3.3000e-004**	**0.0115**	**2.9900e-003**	**3.0000e-004**	**3.2900e-003**	**0.0000**	**12.8182**	**12.8182**	**5.3000e-004**	**0.0000**	**12.8294**

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	3.6100e-003	0.0793	0.1031	1.5000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003	0.0000	13.8992	13.8992	4.1900e-003	0.0000	13.9872
Total	**3.6100e-003**	**0.0793**	**0.1031**	**1.5000e-004**		**5.0000e-003**	**5.0000e-003**		**5.0000e-003**	**5.0000e-003**	**0.0000**	**13.8992**	**13.8992**	**4.1900e-003**	**0.0000**	**13.9872**

3.4 Building Construction - 2016

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	1.5000e-003	0.0153	0.0197	4.0000e-005	1.0400e-003	2.4000e-004	1.2800e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.3309	3.3309	2.0000e-005	0.0000	3.3314
Worker	3.7100e-003	5.4500e-003	0.0566	1.2000e-004	0.0101	9.0000e-005	0.0102	2.6900e-003	8.0000e-005	2.7700e-003	0.0000	9.4873	9.4873	5.1000e-004	0.0000	9.4980
Total	**5.2100e-003**	**0.0207**	**0.0763**	**1.6000e-004**	**0.0112**	**3.3000e-004**	**0.0115**	**2.9900e-003**	**3.0000e-004**	**3.2900e-003**	**0.0000**	**12.8182**	**12.8182**	**5.3000e-004**	**0.0000**	**12.8294**

3.5 Architectural Coating - 2015

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	1.2722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1200e-003	0.0450	0.0333	5.0000e-005		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	4.4682	4.4682	5.8000e-004	0.0000	4.4804
Total	**1.2793**	**0.0450**	**0.0333**	**5.0000e-005**		**3.8700e-003**	**3.8700e-003**		**3.8700e-003**	**3.8700e-003**	**0.0000**	**4.4682**	**4.4682**	**5.8000e-004**	**0.0000**	**4.4804**

3.5 Architectural Coating - 2015

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	1.0900e-003	1.6000e-003	0.0167	3.0000e-005	2.6900e-003	2.0000e-005	2.7100e-003	7.1000e-004	2.0000e-005	7.4000e-004	0.0000	2.6084	2.6084	1.5000e-004	0.0000	2.6115
Total	**1.0900e-003**	**1.6000e-003**	**0.0167**	**3.0000e-005**	**2.6900e-003**	**2.0000e-005**	**2.7100e-003**	**7.1000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.6084**	**2.6084**	**1.5000e-004**	**0.0000**	**2.6115**

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	1.2722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0400e-003	0.0238	0.0321	5.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	4.4682	4.4682	5.8000e-004	0.0000	4.4804
Total	**1.2733**	**0.0238**	**0.0321**	**5.0000e-005**		**1.6600e-003**	**1.6600e-003**		**1.6600e-003**	**1.6600e-003**	**0.0000**	**4.4682**	**4.4682**	**5.8000e-004**	**0.0000**	**4.4804**

3.5 Architectural Coating - 2015

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	1.0900e-003	1.6000e-003	0.0167	3.0000e-005	2.6900e-003	2.0000e-005	2.7100e-003	7.1000e-004	2.0000e-005	7.4000e-004	0.0000	2.6084	2.6084	1.5000e-004	0.0000	2.6115
Total	**1.0900e-003**	**1.6000e-003**	**0.0167**	**3.0000e-005**	**2.6900e-003**	**2.0000e-005**	**2.7100e-003**	**7.1000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.6084**	**2.6084**	**1.5000e-004**	**0.0000**	**2.6115**

3.5 Architectural Coating - 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					
Archit. Coating	0.9087					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6100e-003	0.0297	0.0236	4.0000e-005		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	3.1916	3.1916	3.8000e-004	0.0000	3.1995
Total	**0.9133**	**0.0297**	**0.0236**	**4.0000e-005**		**2.4600e-003**	**2.4600e-003**		**2.4600e-003**	**2.4600e-003**	**0.0000**	**3.1916**	**3.1916**	**3.8000e-004**	**0.0000**	**3.1995**

3.5 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	1.0300e-003	0.0107	2.0000e-005	1.9200e-003	2.0000e-005	1.9400e-003	5.1000e-004	2.0000e-005	5.2000e-004	0.0000	1.7988	1.7988	1.0000e-004	0.0000	1.8008
Total	**7.0000e-004**	**1.0300e-003**	**0.0107**	**2.0000e-005**	**1.9200e-003**	**2.0000e-005**	**1.9400e-003**	**5.1000e-004**	**2.0000e-005**	**5.2000e-004**	**0.0000**	**1.7988**	**1.7988**	**1.0000e-004**	**0.0000**	**1.8008**

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	0.9087					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	0.0170	0.0229	4.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	3.1916	3.1916	3.8000e-004	0.0000	3.1995
Total	**0.9095**	**0.0170**	**0.0229**	**4.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**3.1916**	**3.1916**	**3.8000e-004**	**0.0000**	**3.1995**

3.5 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	1.0300e-003	0.0107	2.0000e-005	1.9200e-003	2.0000e-005	1.9400e-003	5.1000e-004	2.0000e-005	5.2000e-004	0.0000	1.7988	1.7988	1.0000e-004	0.0000	1.8008
Total	**7.0000e-004**	**1.0300e-003**	**0.0107**	**2.0000e-005**	**1.9200e-003**	**2.0000e-005**	**1.9400e-003**	**5.1000e-004**	**2.0000e-005**	**5.2000e-004**	**0.0000**	**1.7988**	**1.7988**	**1.0000e-004**	**0.0000**	**1.8008**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

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	1.1180	2.5738	10.6506	0.0207	1.3896	0.0329	1.4225	0.3718	0.0303	0.4021	0.0000	1,651.6411	1,651.6411	0.0707	0.0000	1,653.1263
Unmitigated	1.2158	3.3272	13.0801	0.0281	1.9055	0.0441	1.9496	0.5099	0.0405	0.5504	0.0000	2,237.9818	2,237.9818	0.0933	0.0000	2,239.9416

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Medical Office Building	2,565.23	636.16	110.05	5,029,255	3,667,575
Total	2,565.23	636.16	110.05	5,029,255	3,667,575

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
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	846.7936	846.7936	0.0220	4.5600e-003	848.6681
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	911.9952	911.9952	0.0237	4.9100e-003	914.0141
NaturalGas Mitigated	3.6000e-003	0.0327	0.0275	2.0000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003	0.0000	35.6288	35.6288	6.8000e-004	6.5000e-004	35.8457
NaturalGas Unmitigated	4.2100e-003	0.0383	0.0321	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.6540	41.6540	8.0000e-004	7.6000e-004	41.9075

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 Structure	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
Medical Office Building	780566	4.2100e-003	0.0383	0.0321	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.6540	41.6540	8.0000e-004	7.6000e-004	41.9075
Total		**4.2100e-003**	**0.0383**	**0.0321**	**2.3000e-004**		**2.9100e-003**	**2.9100e-003**		**2.9100e-003**	**2.9100e-003**	**0.0000**	**41.6540**	**41.6540**	**8.0000e-004**	**7.6000e-004**	**41.9075**

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					
Medical Office Building	667659	3.6000e-003	0.0327	0.0275	2.0000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003	0.0000	35.6288	35.6288	6.8000e-004	6.5000e-004	35.8457
Enclosed Parking Structure	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
Total		**3.6000e-003**	**0.0327**	**0.0275**	**2.0000e-004**		**2.4900e-003**	**2.4900e-003**		**2.4900e-003**	**2.4900e-003**	**0.0000**	**35.6288**	**35.6288**	**6.8000e-004**	**6.5000e-004**	**35.8457**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	765040	387.0377	0.0101	2.0800e-003	387.8945
Medical Office Building	1.03766e+006	524.9575	0.0137	2.8200e-003	526.1196
Total		**911.9952**	**0.0237**	**4.9000e-003**	**914.0141**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	696362	352.2929	9.1600e-003	1.9000e-003	353.0728
Medical Office Building	977457	494.5006	0.0129	2.6600e-003	495.5953
Total		**846.7936**	**0.0220**	**4.5600e-003**	**848.6681**

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

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	0.8987	5.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0100e-003	9.0100e-003	3.0000e-005	0.0000	9.5400e-003
Unmitigated	0.8987	5.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0100e-003	9.0100e-003	3.0000e-005	0.0000	9.5400e-003

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	0.2181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6801					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	5.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0100e-003	9.0100e-003	3.0000e-005	0.0000	9.5400e-003
Total	**0.8987**	**5.0000e-005**	**4.7500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.0100e-003**	**9.0100e-003**	**3.0000e-005**	**0.0000**	**9.5400e-003**

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	0.2181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6801					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	5.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0100e-003	9.0100e-003	3.0000e-005	0.0000	9.5400e-003
Total	**0.8987**	**5.0000e-005**	**4.7500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.0100e-003**	**9.0100e-003**	**3.0000e-005**	**0.0000**	**9.5400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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	62.0094	0.2670	6.5900e-003	69.6575
Unmitigated	65.7793	0.2671	6.6100e-003	73.4358

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	8.14543 / 1.69697	65.7793	0.2671	6.6100e-003	73.4358
Total		**65.7793**	**0.2671**	**6.6100e-003**	**73.4358**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	8.14543 / 1.35758	62.0094	0.2670	6.5900e-003	69.6575
Total		**62.0094**	**0.2670**	**6.5900e-003**	**69.6575**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.8152	0.4619	0.0000	17.5143
Unmitigated	15.6303	0.9237	0.0000	35.0285

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	77	15.6303	0.9237	0.0000	35.0285
Total		**15.6303**	**0.9237**	**0.0000**	**35.0285**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	38.5	7.8152	0.4619	0.0000	17.5143
Total		**7.8152**	**0.4619**	**0.0000**	**17.5143**

9.0 Operational Offroad

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

10.0 Vegetation

All Office Alternative

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	71.00	1000sqft	1.63	71,415.00	0
Enclosed Parking Structure	292.00	Space	2.63	116,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2016
Utility Company	Glendale Water & Power				
CO2 Intensity (lb/MWhr)	1115.33	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project specific parameters from EIR

Construction Phase - Actual construction period per project - 18 months

Off-road Equipment -

Off-road Equipment - Project specific parameters from EIR

Off-road Equipment - Project specific parameters from EIR

Off-road Equipment - Project specific parameters from EIR

Trips and VMT - Project specific parameters from EIR

Demolition -

Grading - Project site size

Architectural Coating - Project specific parameters from EIR

Area Coating -

Water And Wastewater - Project specific parameters from EIR

Solid Waste - Project specific parameters from EIR

Construction Off-road Equipment Mitigation - Project specific parameters from EIR

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	60.00
tblConstructionPhase	NumDays	230.00	250.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	8.00	100.00
tblConstructionPhase	PhaseEndDate	4/29/2016	2/4/2016
tblConstructionPhase	PhaseStartDate	2/6/2016	11/13/2015
tblConstructionPhase	PhaseStartDate	2/21/2015	2/23/2015
tblConstructionPhase	PhaseStartDate	10/4/2014	10/6/2014
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	71,000.00	71,415.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	766.80	77.00
tblTripsAndVMT	HaulingTripNumber	0.00	6,875.00
tblTripsAndVMT	VendorTripNumber	31.00	13.00
tblTripsAndVMT	WorkerTripNumber	72.00	71.00
tblWater	IndoorWaterUseRate	8,909,118.17	8,145,431.25

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					
2014	3.1563	37.8105	27.2816	0.0641	2.6688	1.4108	4.0795	0.9130	1.3322	2.2451	0.0000	6,542.2628	6,542.2628	0.3038	0.0000	6,548.6426
2015	75.0956	34.1630	25.8277	0.0640	3.6827	1.2512	4.9325	1.1618	1.1807	2.3426	0.0000	6,470.9782	6,470.9782	0.4511	0.0000	6,480.4513
2016	74.9295	17.7165	16.7411	0.0284	1.0314	1.1630	2.1944	0.2751	1.0857	1.3608	0.0000	2,689.4214	2,689.4214	0.4426	0.0000	2,698.7167
Total	**153.1814**	**89.6900**	**69.8505**	**0.1566**	**7.3829**	**3.8250**	**11.2064**	**2.3499**	**3.5986**	**5.9485**	**0.0000**	**15,702.6624**	**15,702.6624**	**1.1975**	**0.0000**	**15,727.8106**

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					
2014	1.9295	31.2991	26.3853	0.0641	2.1652	0.8827	3.0479	0.6541	0.8441	1.4982	0.0000	6,542.2628	6,542.2628	0.3038	0.0000	6,548.6426
2015	73.5725	28.2028	24.9703	0.0640	3.1791	0.7772	3.9564	0.9030	0.7472	1.6502	0.0000	6,470.9781	6,470.9781	0.4511	0.0000	6,480.4513
2016	73.5167	9.0954	16.4067	0.0284	1.0314	0.5061	1.5374	0.2751	0.5039	0.7790	0.0000	2,689.4214	2,689.4214	0.4426	0.0000	2,698.7167
Total	**149.0186**	**68.5973**	**67.7623**	**0.1566**	**6.3757**	**2.1660**	**8.5416**	**1.8322**	**2.0952**	**3.9274**	**0.0000**	**15,702.6624**	**15,702.6624**	**1.1975**	**0.0000**	**15,727.8106**

	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	2.72	23.52	2.99	0.00	13.64	43.37	23.78	22.03	41.78	33.98	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	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Energy	0.0231	0.2097	0.1761	1.2600e-003		0.0159	0.0159		0.0159	0.0159		251.5926	251.5926	4.8200e-003	4.6100e-003	253.1237
Mobile	9.3376	23.7221	94.3397	0.2016	14.1085	0.3218	14.4303	3.7694	0.2959	4.0653		17,735.5885	17,735.5885	0.7491		17,751.3193
Total	**14.2860**	**23.9322**	**94.5538**	**0.2028**	**14.1085**	**0.3379**	**14.4464**	**3.7694**	**0.3120**	**4.0814**		**17,987.2605**	**17,987.2605**	**0.7541**	**4.6100e-003**	**18,004.5272**

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	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Energy	0.0197	0.1793	0.1506	1.0800e-003		0.0136	0.0136		0.0136	0.0136		215.2003	215.2003	4.1200e-003	3.9500e-003	216.5099
Mobile	8.6334	18.3600	77.1419	0.1488	10.2886	0.2407	10.5293	2.7488	0.2213	2.9701		13,087.2971	13,087.2971	0.5678		13,099.2205
Total	**13.5785**	**18.5397**	**77.3305**	**0.1499**	**10.2886**	**0.2545**	**10.5431**	**2.7488**	**0.2351**	**2.9839**		**13,302.5768**	**13,302.5768**	**0.5721**	**3.9500e-003**	**13,315.8146**

	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	**4.95**	**22.53**	**18.22**	**26.09**	**27.08**	**24.68**	**27.02**	**27.08**	**24.65**	**26.89**	**0.00**	**26.04**	**26.04**	**24.14**	**14.32**	**26.04**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2014	10/3/2014	5	25	
2	Grading	Grading	10/6/2014	2/20/2015	5	100	
3	Building Construction	Building Construction	2/23/2015	2/5/2016	5	250	
4	Architectural Coating	Architectural Coating	11/13/2015	2/4/2016	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 282,323; Non-Residential Outdoor: 94,108 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2014

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					0.5441	0.0000	0.5441	0.0824	0.0000	0.0824			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.5441**	**0.9304**	**1.4745**	**0.0824**	**0.8904**	**0.9727**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0590	0.9254	0.6485	1.8600e-003	0.0439	0.0176	0.0615	0.0120	0.0162	0.0282		191.1753	191.1753	1.6500e-003		191.2100
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**0.1118**	**0.9963**	**1.3866**	**3.1900e-003**	**0.1557**	**0.0186**	**0.1743**	**0.0417**	**0.0171**	**0.0588**		**310.5951**	**310.5951**	**8.8900e-003**		**310.7819**

3.2 Demolition - 2014

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					0.2122	0.0000	0.2122	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.2122**	**0.4023**	**0.6145**	**0.0321**	**0.4023**	**0.4345**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0590	0.9254	0.6485	1.8600e-003	0.0439	0.0176	0.0615	0.0120	0.0162	0.0282		191.1753	191.1753	1.6500e-003		191.2100
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**0.1118**	**0.9963**	**1.3866**	**3.1900e-003**	**0.1557**	**0.0186**	**0.1743**	**0.0417**	**0.0171**	**0.0588**		**310.5951**	**310.5951**	**8.8900e-003**		**310.7819**

3.3 Grading - 2014

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					0.8256	0.0000	0.8256	0.4243	0.0000	0.4243			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.8256**	**0.9304**	**1.7560**	**0.4243**	**0.8904**	**1.3147**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.6106	25.2475	17.6907	0.0508	1.7314	0.4793	2.2107	0.4590	0.4408	0.8998		5,215.5962	5,215.5962	0.0451		5,216.5426
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**1.6634**	**25.3183**	**18.4289**	**0.0521**	**1.8432**	**0.4803**	**2.3236**	**0.4886**	**0.4418**	**0.9304**		**5,335.0160**	**5,335.0160**	**0.0523**		**5,336.1145**

3.3 Grading - 2014

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					0.3220	0.0000	0.3220	0.1655	0.0000	0.1655			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.3220**	**0.4023**	**0.7243**	**0.1655**	**0.4023**	**0.5678**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.6106	25.2475	17.6907	0.0508	1.7314	0.4793	2.2107	0.4590	0.4408	0.8998		5,215.5962	5,215.5962	0.0451		5,216.5426
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	0.0528	0.0708	0.7381	1.3300e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		119.4197	119.4197	7.2400e-003		119.5719
Total	**1.6634**	**25.3183**	**18.4289**	**0.0521**	**1.8432**	**0.4803**	**2.3236**	**0.4886**	**0.4418**	**0.9304**		**5,335.0160**	**5,335.0160**	**0.0523**		**5,336.1145**

3.3 Grading - 2015

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					0.8256	0.0000	0.8256	0.4243	0.0000	0.4243			0.0000			0.0000
Off-Road	1.4120	11.9409	8.8138	0.0120		0.8748	0.8748		0.8359	0.8359		1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**1.4120**	**11.9409**	**8.8138**	**0.0120**	**0.8256**	**0.8748**	**1.7004**	**0.4243**	**0.8359**	**1.2602**		**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.4108	22.1585	16.3503	0.0507	2.7454	0.3739	3.1193	0.7079	0.3440	1.0518		5,154.7735	5,154.7735	0.0410		5,155.6338
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	0.0474	0.0636	0.6636	1.3300e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		115.5661	115.5661	6.6300e-003		115.7054
Total	**1.4581**	**22.2221**	**17.0139**	**0.0520**	**2.8572**	**0.3749**	**3.2321**	**0.7375**	**0.3449**	**1.0824**		**5,270.3396**	**5,270.3396**	**0.0476**		**5,271.3392**

3.3 Grading - 2015

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					0.3220	0.0000	0.3220	0.1655	0.0000	0.1655			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0120		0.4023	0.4023		0.4023	0.4023	0.0000	1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**0.2661**	**5.9808**	**7.9564**	**0.0120**	**0.3220**	**0.4023**	**0.7243**	**0.1655**	**0.4023**	**0.5678**	**0.0000**	**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.4108	22.1585	16.3503	0.0507	2.7454	0.3739	3.1193	0.7079	0.3440	1.0518		5,154.7735	5,154.7735	0.0410		5,155.6338
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	0.0474	0.0636	0.6636	1.3300e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		115.5661	115.5661	6.6300e-003		115.7054
Total	**1.4581**	**22.2221**	**17.0139**	**0.0520**	**2.8572**	**0.3749**	**3.2321**	**0.7375**	**0.3449**	**1.0824**		**5,270.3396**	**5,270.3396**	**0.0476**		**5,271.3392**

3.4 Building Construction - 2015

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	1.4538	14.3777	8.2983	0.0113		0.9995	0.9995		0.9195	0.9195		1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**1.4538**	**14.3777**	**8.2983**	**0.0113**		**0.9995**	**0.9995**		**0.9195**	**0.9195**		**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1345	1.3043	1.6689	2.8100e-003	0.0812	0.0225	0.1037	0.0231	0.0207	0.0438		284.2019	284.2019	2.3000e-003		284.2503
Worker	0.3362	0.4513	4.7116	9.4300e-003	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		820.5193	820.5193	0.0471		821.5082
Total	**0.4707**	**1.7556**	**6.3806**	**0.0122**	**0.8748**	**0.0295**	**0.9043**	**0.2336**	**0.0271**	**0.2607**		**1,104.7212**	**1,104.7212**	**0.0494**		**1,105.7585**

3.4 Building Construction - 2015

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1345	1.3043	1.6689	2.8100e-003	0.0812	0.0225	0.1037	0.0231	0.0207	0.0438		284.2019	284.2019	2.3000e-003		284.2503
Worker	0.3362	0.4513	4.7116	9.4300e-003	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		820.5193	820.5193	0.0471		821.5082
Total	**0.4707**	**1.7556**	**6.3806**	**0.0122**	**0.8748**	**0.0295**	**0.9043**	**0.2336**	**0.0271**	**0.2607**		**1,104.7212**	**1,104.7212**	**0.0494**		**1,105.7585**

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	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646		1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**1.3816**	**13.7058**	**8.2122**	**0.0113**		**0.9398**	**0.9398**		**0.8646**	**0.8646**		**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

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	0.1187	1.1511	1.5543	2.8100e-003	0.0813	0.0187	0.0999	0.0231	0.0172	0.0403		281.0605	281.0605	2.0800e-003		281.1043
Worker	0.3028	0.4070	4.2523	9.4200e-003	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		792.1578	792.1578	0.0433		793.0678
Total	**0.4215**	**1.5582**	**5.8066**	**0.0122**	**0.8749**	**0.0253**	**0.9002**	**0.2336**	**0.0233**	**0.2569**		**1,073.2184**	**1,073.2184**	**0.0454**		**1,074.1720**

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

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	0.1187	1.1511	1.5543	2.8100e-003	0.0813	0.0187	0.0999	0.0231	0.0172	0.0403		281.0605	281.0605	2.0800e-003		281.1043
Worker	0.3028	0.4070	4.2523	9.4200e-003	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		792.1578	792.1578	0.0433		793.0678
Total	**0.4215**	**1.5582**	**5.8066**	**0.0122**	**0.8749**	**0.0253**	**0.9002**	**0.2336**	**0.0233**	**0.2569**		**1,073.2184**	**1,073.2184**	**0.0454**		**1,074.1720**

3.5 Architectural Coating - 2015

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	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177
Total	**73.1048**	**2.5703**	**1.9018**	**2.9700e-003**		**0.2209**	**0.2209**		**0.2209**	**0.2209**		**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0663	0.0890	0.9291	1.8600e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		161.7925	161.7925	9.2900e-003		161.9875
Total	**0.0663**	**0.0890**	**0.9291**	**1.8600e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**161.7925**	**161.7925**	**9.2900e-003**		**161.9875**

3.5 Architectural Coating - 2015

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	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0367		282.2177
Total	**72.7577**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0663	0.0890	0.9291	1.8600e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		161.7925	161.7925	9.2900e-003		161.9875
Total	**0.0663**	**0.0890**	**0.9291**	**1.8600e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**161.7925**	**161.7925**	**9.2900e-003**		**161.9875**

3.5 Architectural Coating - 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					
Archit. Coating	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**73.0667**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0597	0.0803	0.8385	1.8600e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		156.2001	156.2001	8.5400e-003		156.3796
Total	**0.0597**	**0.0803**	**0.8385**	**1.8600e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**156.2001**	**156.2001**	**8.5400e-003**		**156.3796**

3.5 Architectural Coating - 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					
Archit. Coating	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**72.7577**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0597	0.0803	0.8385	1.8600e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		156.2001	156.2001	8.5400e-003		156.3796
Total	**0.0597**	**0.0803**	**0.8385**	**1.8600e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**156.2001**	**156.2001**	**8.5400e-003**		**156.3796**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

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	8.6334	18.3600	77.1419	0.1488	10.2886	0.2407	10.5293	2.7488	0.2213	2.9701		13,087.2971	13,087.2971	0.5678		13,099.2205
Unmitigated	9.3376	23.7221	94.3397	0.2016	14.1085	0.3218	14.4303	3.7694	0.2959	4.0653		17,735.5885	17,735.5885	0.7491		17,751.3193

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Medical Office Building	2,565.23	636.16	110.05	5,029,255	3,667,575
Total	2,565.23	636.16	110.05	5,029,255	3,667,575

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
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	0.0197	0.1793	0.1506	1.0800e-003		0.0136	0.0136		0.0136	0.0136		215.2003	215.2003	4.1200e-003	3.9500e-003	216.5099
NaturalGas Unmitigated	0.0231	0.2097	0.1761	1.2600e-003		0.0159	0.0159		0.0159	0.0159		251.5926	251.5926	4.8200e-003	4.6100e-003	253.1237

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 Structure	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
Medical Office Building	2138.54	0.0231	0.2097	0.1761	1.2600e-003		0.0159	0.0159		0.0159	0.0159		251.5926	251.5926	4.8200e-003	4.6100e-003	253.1237
Total		**0.0231**	**0.2097**	**0.1761**	**1.2600e-003**		**0.0159**	**0.0159**		**0.0159**	**0.0159**		**251.5926**	**251.5926**	**4.8200e-003**	**4.6100e-003**	**253.1237**

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					
Medical Office Building	1.8292	0.0197	0.1793	0.1506	1.0800e-003		0.0136	0.0136		0.0136	0.0136		215.2003	215.2003	4.1200e-003	3.9500e-003	216.5099
Enclosed Parking Structure	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		**0.0197**	**0.1793**	**0.1506**	**1.0800e-003**		**0.0136**	**0.0136**		**0.0136**	**0.0136**		**215.2003**	**215.2003**	**4.1200e-003**	**3.9500e-003**	**216.5099**

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

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	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Unmitigated	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842

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	1.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7100e-003	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Total	**4.9254**	**3.6000e-004**	**0.0380**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0794**	**0.0794**	**2.2000e-004**		**0.0842**

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	1.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7100e-003	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Total	**4.9254**	**3.6000e-004**	**0.0380**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0794**	**0.0794**	**2.2000e-004**		**0.0842**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

All Office Alternative

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	71.00	1000sqft	1.63	71,415.00	0
Enclosed Parking Structure	292.00	Space	2.63	116,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2016
Utility Company	Glendale Water & Power				
CO2 Intensity (lb/MWhr)	1115.33	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project specific parameters from EIR

Construction Phase - Actual construction period per project - 18 months

Off-road Equipment -

Off-road Equipment - Project specific parameters from EIR

Off-road Equipment - Project specific parameters from EIR

Off-road Equipment - Project specific parameters from EIR

Trips and VMT - Project specific parameters from EIR

Demolition -

Grading - Project site size

Architectural Coating - Project specific parameters from EIR

Area Coating -

Water And Wastewater - Project specific parameters from EIR

Solid Waste - Project specific parameters from EIR

Construction Off-road Equipment Mitigation - Project specific parameters from EIR

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	60.00
tblConstructionPhase	NumDays	230.00	250.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	8.00	100.00
tblConstructionPhase	PhaseEndDate	4/29/2016	2/4/2016
tblConstructionPhase	PhaseStartDate	2/6/2016	11/13/2015
tblConstructionPhase	PhaseStartDate	2/21/2015	2/23/2015
tblConstructionPhase	PhaseStartDate	10/4/2014	10/6/2014
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	71,000.00	71,415.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	766.80	77.00
tblTripsAndVMT	HaulingTripNumber	0.00	6,875.00
tblTripsAndVMT	VendorTripNumber	31.00	13.00
tblTripsAndVMT	WorkerTripNumber	72.00	71.00
tblWater	IndoorWaterUseRate	8,909,118.17	8,145,431.25

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					
2014	3.0598	36.9140	25.4312	0.0643	2.6688	1.4092	4.0780	0.9130	1.3307	2.2437	0.0000	6,562.4872	6,562.4872	0.3033	0.0000	6,568.8564
2015	75.0745	33.3790	23.9397	0.0642	3.6827	1.2510	4.9312	1.1618	1.1796	2.3414	0.0000	6,490.8512	6,490.8512	0.4510	0.0000	6,500.3231
2016	74.9116	17.6448	16.9159	0.0292	1.0314	1.1628	2.1942	0.2751	1.0855	1.3606	0.0000	2,754.4801	2,754.4801	0.4426	0.0000	2,763.7741
Total	**153.0459**	**87.9378**	**66.2868**	**0.1577**	**7.3829**	**3.8230**	**11.2034**	**2.3499**	**3.5958**	**5.9457**	**0.0000**	**15,807.8185**	**15,807.8185**	**1.1969**	**0.0000**	**15,832.9536**

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					
2014	1.8330	30.4026	24.5349	0.0643	2.1652	0.8811	3.0463	0.6541	0.8427	1.4968	0.0000	6,562.4872	6,562.4872	0.3033	0.0000	6,568.8564
2015	73.5513	27.4189	23.0822	0.0642	3.1791	0.7760	3.9551	0.9030	0.7460	1.6490	0.0000	6,490.8512	6,490.8512	0.4510	0.0000	6,500.3231
2016	73.4988	9.0237	16.5815	0.0292	1.0314	0.5059	1.5372	0.2751	0.5037	0.7788	0.0000	2,754.4801	2,754.4801	0.4426	0.0000	2,763.7741
Total	**148.8831**	**66.8451**	**64.1985**	**0.1577**	**6.3757**	**2.1629**	**8.5386**	**1.8322**	**2.0924**	**3.9246**	**0.0000**	**15,807.8185**	**15,807.8185**	**1.1969**	**0.0000**	**15,832.9536**

	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	2.72	23.99	3.15	0.00	13.64	43.42	23.79	22.03	41.81	33.99	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	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Energy	0.0231	0.2097	0.1761	1.2600e-003		0.0159	0.0159		0.0159	0.0159		251.5926	251.5926	4.8200e-003	4.6100e-003	253.1237
Mobile	8.9930	22.5811	94.6193	0.2122	14.1085	0.3202	14.4286	3.7694	0.2944	4.0638		18,636.5679	18,636.5679	0.7484		18,652.2845
Total	**13.9414**	**22.7911**	**94.8334**	**0.2134**	**14.1085**	**0.3362**	**14.4447**	**3.7694**	**0.3104**	**4.0799**		**18,888.2399**	**18,888.2399**	**0.7535**	**4.6100e-003**	**18,905.4923**

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	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Energy	0.0197	0.1793	0.1506	1.0800e-003		0.0136	0.0136		0.0136	0.0136		215.2003	215.2003	4.1200e-003	3.9500e-003	216.5099
Mobile	8.2673	17.5174	75.5242	0.1566	10.2886	0.2390	10.5276	2.7488	0.2198	2.9686		13,750.4863	13,750.4863	0.5671		13,762.3955
Total	**13.2124**	**17.6971**	**75.7129**	**0.1577**	**10.2886**	**0.2528**	**10.5414**	**2.7488**	**0.2335**	**2.9824**		**13,965.7660**	**13,965.7660**	**0.5714**	**3.9500e-003**	**13,978.9896**

	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	**5.23**	**22.35**	**20.16**	**26.13**	**27.08**	**24.81**	**27.02**	**27.08**	**24.77**	**26.90**	**0.00**	**26.06**	**26.06**	**24.16**	**14.32**	**26.06**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2014	10/3/2014	5	25	
2	Grading	Grading	10/6/2014	2/20/2015	5	100	
3	Building Construction	Building Construction	2/23/2015	2/5/2016	5	250	
4	Architectural Coating	Architectural Coating	11/13/2015	2/4/2016	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 282,323; Non-Residential Outdoor: 94,108 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2014

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					0.5441	0.0000	0.5441	0.0824	0.0000	0.0824			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.5441**	**0.9304**	**1.4745**	**0.0824**	**0.8904**	**0.9727**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0556	0.8928	0.5785	1.8600e-003	0.0439	0.0175	0.0614	0.0120	0.0161	0.0281		191.6285	191.6285	1.6300e-003		191.6628
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**0.1071**	**0.9573**	**1.3745**	**3.2800e-003**	**0.1557**	**0.0186**	**0.1742**	**0.0417**	**0.0171**	**0.0587**		**318.9080**	**318.9080**	**8.8700e-003**		**319.0944**

3.2 Demolition - 2014

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					0.2122	0.0000	0.2122	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.2122**	**0.4023**	**0.6145**	**0.0321**	**0.4023**	**0.4345**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	0.0556	0.8928	0.5785	1.8600e-003	0.0439	0.0175	0.0614	0.0120	0.0161	0.0281		191.6285	191.6285	1.6300e-003		191.6628
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**0.1071**	**0.9573**	**1.3745**	**3.2800e-003**	**0.1557**	**0.0186**	**0.1742**	**0.0417**	**0.0171**	**0.0587**		**318.9080**	**318.9080**	**8.8700e-003**		**319.0944**

3.3 Grading - 2014

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					0.8256	0.0000	0.8256	0.4243	0.0000	0.4243			0.0000			0.0000
Off-Road	1.4929	12.4922	8.8528	0.0121		0.9304	0.9304		0.8904	0.8904		1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**1.4929**	**12.4922**	**8.8528**	**0.0121**	**0.8256**	**0.9304**	**1.7560**	**0.4243**	**0.8904**	**1.3147**		**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.5154	24.3573	15.7825	0.0508	1.7314	0.4777	2.2092	0.4590	0.4394	0.8984		5,227.9609	5,227.9609	0.0446		5,228.8967
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**1.5669**	**24.4218**	**16.5785**	**0.0523**	**1.8432**	**0.4788**	**2.3220**	**0.4886**	**0.4404**	**0.9290**		**5,355.2403**	**5,355.2403**	**0.0518**		**5,356.3283**

3.3 Grading - 2014

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					0.3220	0.0000	0.3220	0.1655	0.0000	0.1655			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0121		0.4023	0.4023		0.4023	0.4023	0.0000	1,207.2469	1,207.2469	0.2515		1,212.5281
Total	**0.2661**	**5.9808**	**7.9564**	**0.0121**	**0.3220**	**0.4023**	**0.7243**	**0.1655**	**0.4023**	**0.5678**	**0.0000**	**1,207.2469**	**1,207.2469**	**0.2515**		**1,212.5281**

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	1.5154	24.3573	15.7825	0.0508	1.7314	0.4777	2.2092	0.4590	0.4394	0.8984		5,227.9609	5,227.9609	0.0446		5,228.8967
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	0.0515	0.0645	0.7960	1.4200e-003	0.1118	1.0500e-003	0.1128	0.0296	9.6000e-004	0.0306		127.2795	127.2795	7.2400e-003		127.4316
Total	**1.5669**	**24.4218**	**16.5785**	**0.0523**	**1.8432**	**0.4788**	**2.3220**	**0.4886**	**0.4404**	**0.9290**		**5,355.2403**	**5,355.2403**	**0.0518**		**5,356.3283**

3.3 Grading - 2015

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					0.8256	0.0000	0.8256	0.4243	0.0000	0.4243			0.0000			0.0000
Off-Road	1.4120	11.9409	8.8138	0.0120		0.8748	0.8748		0.8359	0.8359		1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**1.4120**	**11.9409**	**8.8138**	**0.0120**	**0.8256**	**0.8748**	**1.7004**	**0.4243**	**0.8359**	**1.2602**		**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.3321	21.3802	14.4079	0.0508	2.7454	0.3727	3.1181	0.7079	0.3428	1.0506		5,167.0228	5,167.0228	0.0405		5,167.8724
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	0.0463	0.0579	0.7179	1.4200e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		123.1899	123.1899	6.6300e-003		123.3292
Total	**1.3784**	**21.4381**	**15.1258**	**0.0522**	**2.8572**	**0.3737**	**3.2308**	**0.7375**	**0.3437**	**1.0812**		**5,290.2127**	**5,290.2127**	**0.0471**		**5,291.2016**

3.3 Grading - 2015

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					0.3220	0.0000	0.3220	0.1655	0.0000	0.1655			0.0000			0.0000
Off-Road	0.2661	5.9808	7.9564	0.0120		0.4023	0.4023		0.4023	0.4023	0.0000	1,200.6386	1,200.6386	0.2451		1,205.7861
Total	**0.2661**	**5.9808**	**7.9564**	**0.0120**	**0.3220**	**0.4023**	**0.7243**	**0.1655**	**0.4023**	**0.5678**	**0.0000**	**1,200.6386**	**1,200.6386**	**0.2451**		**1,205.7861**

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	1.3321	21.3802	14.4079	0.0508	2.7454	0.3727	3.1181	0.7079	0.3428	1.0506		5,167.0228	5,167.0228	0.0405		5,167.8724
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	0.0463	0.0579	0.7179	1.4200e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		123.1899	123.1899	6.6300e-003		123.3292
Total	**1.3784**	**21.4381**	**15.1258**	**0.0522**	**2.8572**	**0.3737**	**3.2308**	**0.7375**	**0.3437**	**1.0812**		**5,290.2127**	**5,290.2127**	**0.0471**		**5,291.2016**

3.4 Building Construction - 2015

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	1.4538	14.3777	8.2983	0.0113		0.9995	0.9995		0.9195	0.9195		1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**1.4538**	**14.3777**	**8.2983**	**0.0113**		**0.9995**	**0.9995**		**0.9195**	**0.9195**		**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1225	1.2712	1.4069	2.8300e-003	0.0812	0.0222	0.1035	0.0231	0.0204	0.0436		286.5944	286.5944	2.2400e-003		286.6414
Worker	0.3286	0.4111	5.0974	0.0101	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		874.6481	874.6481	0.0471		875.6370
Total	**0.4511**	**1.6823**	**6.5042**	**0.0129**	**0.8748**	**0.0292**	**0.9041**	**0.2336**	**0.0268**	**0.2604**		**1,161.2425**	**1,161.2425**	**0.0493**		**1,162.2785**

3.4 Building Construction - 2015

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,191.7021	1,191.7021	0.3558		1,199.1733
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,191.7021**	**1,191.7021**	**0.3558**		**1,199.1733**

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	0.1225	1.2712	1.4069	2.8300e-003	0.0812	0.0222	0.1035	0.0231	0.0204	0.0436		286.5944	286.5944	2.2400e-003		286.6414
Worker	0.3286	0.4111	5.0974	0.0101	0.7936	6.9800e-003	0.8006	0.2105	6.4000e-003	0.2169		874.6481	874.6481	0.0471		875.6370
Total	**0.4511**	**1.6823**	**6.5042**	**0.0129**	**0.8748**	**0.0292**	**0.9041**	**0.2336**	**0.0268**	**0.2604**		**1,161.2425**	**1,161.2425**	**0.0493**		**1,162.2785**

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	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646		1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**1.3816**	**13.7058**	**8.2122**	**0.0113**		**0.9398**	**0.9398**		**0.8646**	**0.8646**		**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

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	0.1082	1.1228	1.2947	2.8300e-003	0.0813	0.0185	0.0997	0.0231	0.0170	0.0401		283.4376	283.4376	2.0200e-003		283.4801
Worker	0.2966	0.3708	4.6151	0.0101	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		844.5154	844.5154	0.0433		845.4254
Total	**0.4049**	**1.4936**	**5.9098**	**0.0129**	**0.8749**	**0.0251**	**0.9000**	**0.2336**	**0.0231**	**0.2567**		**1,127.9530**	**1,127.9530**	**0.0454**		**1,128.9054**

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	0.2778	6.1000	7.9292	0.0113		0.3843	0.3843		0.3843	0.3843	0.0000	1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**0.2778**	**6.1000**	**7.9292**	**0.0113**		**0.3843**	**0.3843**		**0.3843**	**0.3843**	**0.0000**	**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

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	0.1082	1.1228	1.2947	2.8300e-003	0.0813	0.0185	0.0997	0.0231	0.0170	0.0401		283.4376	283.4376	2.0200e-003		283.4801
Worker	0.2966	0.3708	4.6151	0.0101	0.7936	6.6300e-003	0.8002	0.2105	6.1000e-003	0.2166		844.5154	844.5154	0.0433		845.4254
Total	**0.4049**	**1.4936**	**5.9098**	**0.0129**	**0.8749**	**0.0251**	**0.9000**	**0.2336**	**0.0231**	**0.2567**		**1,127.9530**	**1,127.9530**	**0.0454**		**1,128.9054**

3.5 Architectural Coating - 2015

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	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177
Total	**73.1048**	**2.5703**	**1.9018**	**2.9700e-003**		**0.2209**	**0.2209**		**0.2209**	**0.2209**		**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0648	0.0811	1.0051	1.9800e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		172.4658	172.4658	9.2900e-003		172.6608
Total	**0.0648**	**0.0811**	**1.0051**	**1.9800e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**172.4658**	**172.4658**	**9.2900e-003**		**172.6608**

3.5 Architectural Coating - 2015

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	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0367		282.2177
Total	**72.7577**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0367**		**282.2177**

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	0.0648	0.0811	1.0051	1.9800e-003	0.1565	1.3800e-003	0.1579	0.0415	1.2600e-003	0.0428		172.4658	172.4658	9.2900e-003		172.6608
Total	**0.0648**	**0.0811**	**1.0051**	**1.9800e-003**	**0.1565**	**1.3800e-003**	**0.1579**	**0.0415**	**1.2600e-003**	**0.0428**		**172.4658**	**172.4658**	**9.2900e-003**		**172.6608**

3.5 Architectural Coating - 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					
Archit. Coating	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**73.0667**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0585	0.0731	0.9100	1.9800e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		166.5242	166.5242	8.5400e-003		166.7036
Total	**0.0585**	**0.0731**	**0.9100**	**1.9800e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**166.5242**	**166.5242**	**8.5400e-003**		**166.7036**

3.5 Architectural Coating - 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					
Archit. Coating	72.6982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**72.7577**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0585	0.0731	0.9100	1.9800e-003	0.1565	1.3100e-003	0.1578	0.0415	1.2000e-003	0.0427		166.5242	166.5242	8.5400e-003		166.7036
Total	**0.0585**	**0.0731**	**0.9100**	**1.9800e-003**	**0.1565**	**1.3100e-003**	**0.1578**	**0.0415**	**1.2000e-003**	**0.0427**		**166.5242**	**166.5242**	**8.5400e-003**		**166.7036**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

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	8.2673	17.5174	75.5242	0.1566	10.2886	0.2390	10.5276	2.7488	0.2198	2.9686		13,750.4863	13,750.4863	0.5671		13,762.3955
Unmitigated	8.9930	22.5811	94.6193	0.2122	14.1085	0.3202	14.4286	3.7694	0.2944	4.0638		18,636.5679	18,636.5679	0.7484		18,652.2845

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Medical Office Building	2,565.23	636.16	110.05	5,029,255	3,667,575
Total	2,565.23	636.16	110.05	5,029,255	3,667,575

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
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	0.0197	0.1793	0.1506	1.0800e-003		0.0136	0.0136		0.0136	0.0136		215.2003	215.2003	4.1200e-003	3.9500e-003	216.5099
NaturalGas Unmitigated	0.0231	0.2097	0.1761	1.2600e-003		0.0159	0.0159		0.0159	0.0159		251.5926	251.5926	4.8200e-003	4.6100e-003	253.1237

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					
Medical Office Building	2138.54	0.0231	0.2097	0.1761	1.2600e-003		0.0159	0.0159		0.0159	0.0159		251.5926	251.5926	4.8200e-003	4.6100e-003	253.1237
Enclosed Parking Structure	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		**0.0231**	**0.2097**	**0.1761**	**1.2600e-003**		**0.0159**	**0.0159**		**0.0159**	**0.0159**		**251.5926**	**251.5926**	**4.8200e-003**	**4.6100e-003**	**253.1237**

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					
Medical Office Building	1.8292	0.0197	0.1793	0.1506	1.0800e-003		0.0136	0.0136		0.0136	0.0136		215.2003	215.2003	4.1200e-003	3.9500e-003	216.5099
Enclosed Parking Structure	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		**0.0197**	**0.1793**	**0.1506**	**1.0800e-003**		**0.0136**	**0.0136**		**0.0136**	**0.0136**		**215.2003**	**215.2003**	**4.1200e-003**	**3.9500e-003**	**216.5099**

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

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	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Unmitigated	4.9254	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842

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	1.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7100e-003	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Total	**4.9254**	**3.6000e-004**	**0.0380**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0794**	**0.0794**	**2.2000e-004**		**0.0842**

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	1.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7100e-003	3.6000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0794	0.0794	2.2000e-004		0.0842
Total	**4.9254**	**3.6000e-004**	**0.0380**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0794**	**0.0794**	**2.2000e-004**		**0.0842**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

Noise Calculations

Table N-2
NOISE LEVEL CONTOURS - Existing + Alternative 4

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1)	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	15,051	35	50	0	0	1.8%	0.7%	65.0
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,333	25	35	0	0	1.8%	0.7%	53.4
Oak St btwn Pacific Ave and Kenilworth	2	0	852	25	45	0	0	1.8%	0.7%	50.4
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,389	25	25	0	0	1.8%	0.7%	55.1
Pacific Ave north of Colorado St	4	10	8,727	35	50	0	0	1.8%	0.7%	63.1

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-2
NOISE LEVEL CONTOURS - Existing + Alternative 4

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	15,501	35	50	0	0	1.8%	0.7%	65.1
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,874	25	35	0	0	1.8%	0.7%	54.9
Oak St btwn Pacific Ave and Kenilworth	2	0	655	25	45	0	0	1.8%	0.7%	49.2
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,045	25	25	0	0	1.8%	0.7%	53.9
Pacific Ave north of Colorado St	4	10	8,727	35	50	0	0	1.8%	0.7%	63.1

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Table N-2
NOISE LEVEL CONTOURS - Existing + Alternative 4

ROADWAY NAME Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1)	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	dB(A) CNEL
W Colorado Street west of Pacific Ave	4	12	13,524	35	50	0	0	1.8%	0.7%	64.6
Harvard St btwn Kenilworth Ave and Pacific	2	0	1,277	25	35	0	0	1.8%	0.7%	53.3
Oak St btwn Pacific Ave and Kenilworth	2	0	1,252	25	45	0	0	1.8%	0.7%	52.1
Kenilworth Ave btwn W Colorado and Harvard	2	0	1,073	25	25	0	0	1.8%	0.7%	54.0
Pacific Ave north of Colorado St	4	10	7,200	35	50	0	0	1.8%	0.7%	62.3

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Calculations

KOA CORPORATION
12/27/2013

507-525 W. Colorado Street Mixed Use Project
Project Trip Generation - Delicatessen & Medical Office (75ksf)

Land Use	Intensity	Unit	Weekday						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
TRIP GENERATION RATES [1]									
Medical Office (Land Use 720)	-	KSF	36.13	79%	21%	2.39	28%	72%	3.57
Fast-Food Restaurant without Drive-Through (Land Use 933)	-	KSF	716.00	60%	40%	43.87	51%	49%	26.15
Day Care Center (Land Use 565)	-	KSF	74.06	53%	47%	12.18	47%	53%	12.34
General Office (Land Use 710)	-	KSF	11.03	88%	12%	1.56	17%	83%	1.49
FORECAST TRIP GENERATION									
Proposed Land Uses									
Medical Office	75.000	KSF	2,710	141	38	179	75	193	268
Delicatessen	1.000	KSF	716	26	18	44	13	13	26
Trip Generation (Proposed Land Uses)			3,426	167	56	223	88	206	294
Internal Trip Reduction									
Delicatessen (5%)			*(72)*	*(3)*	*(1)*	*(4)*	*(1)*	*(2)*	*(3)*
Total Internal Trip Reduction			*(72)*	*(3)*	*(1)*	*(4)*	*(1)*	*(2)*	*(3)*
Project Trip Generation (Site-Adjacent Intersections)			3,354	164	55	219	87	204	291
Pass-by Trip Reduction (10%)									
Delicatessen			*(64)*	*(2)*	*(2)*	*(4)*	*(1)*	*(1)*	*(2)*
Total Pass-by Trip Reduction			*(64)*	*(2)*	*(2)*	*(4)*	*(1)*	*(1)*	*(2)*
Project Trip Generation (Area Study Intersections)			3,290	162	53	215	86	203	289
Existing Land Uses (To Be Removed)									
Child Care Center	8.704	KSF	645	56	50	106	50	57	107
Office	5.115	KSF	56	7	1	8	1	7	8
Existing Trip Generation (Site-Adjacent Intersections)			701	63	51	114	51	64	115
Pass-by Trip Reduction (10%)									
Child Care Center			*(65)*	*(6)*	*(5)*	*(11)*	*(5)*	*(6)*	*(11)*
Existing Trip Generation (Area Study Intersections)			636	57	46	103	46	58	104
Net Trip Generation (Site-Adjacent)			2,653	101	4	105	36	140	176
Net Trip Generation (Area Study Intersections)			2,654	105	7	112	40	145	185

Note: DU = Dwelling Units; KSF = 1,000s of square feet

[1] Source: Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition.*

KOA CORPORATION
12/27/2013
DRAFT

507-525 W. Colorado St Mixed Use Project, Glendale
Residential Street Segment Analysis (Deli=1k, Med Office=75k)
(With Left Turn Out of Project Driveway Prohibited)

SCENARIO A *

				DAILY TRAFFIC VOLUME					
							FUTURE (2015)		
STREET SEGMENT	STREET CLASSIFICATION	DAILY CAPACITY	DIRECTION	EXISTING	PROJECT ONLY	EXISTING PLUS PROJECT	WITHOUT PROJECT	WITH PROJECT	Significant Project Impact
Kenilworth Ave. between			NB	476	597	1,073	486	1,083	
Harvard St. and Colorado St.	Local	2,500	SB	316	0	316	322	322	NO
			Total	792	597	1,389	808	1,405	
Harvard St. between			EB	771	133	904	786	919	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	506	0	506	516	516	NO
			Total	1,277	133	1,410	1,302	1,435	
Oak St. between			EB	350	464	814	357	821	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	305	0	305	311	311	NO
			Total	655	464	1,119	668	1,132	

* Project outbound trips to northbound Pacific Ave. via Harvard St., and to eastbound Colorado St. and southbound Pacific Ave. via Oak St.

SCENARIO B *

				DAILY TRAFFIC VOLUME					
							FUTURE (2015)		
STREET SEGMENT	STREET CLASSIFICATION	DAILY CAPACITY	DIRECTION	EXISTING	PROJECT ONLY	EXISTING PLUS PROJECT	WITHOUT PROJECT	WITH PROJECT	Significant Project Impact
Kenilworth Ave. between			NB	476	597	1,073	486	1,083	
Harvard St. and Colorado St.	Local	2,500	SB	316	0	316	322	322	NO
			Total	792	597	1,389	808	1,405	
Harvard St. between			EB	771	597	1,368	786	1,383	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	506	0	506	516	516	NO
			Total	1,277	597	1,874	1,302	1,899	
Oak St. between			EB	350	0	350	357	357	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	305	0	305	311	311	NO
			Total	655	0	655	668	668	

* Project outbound trips to northbound Pacific Ave., eastbound Colorado St. and southbound Pacific Ave. via Harvard St.

SCENARIO C *

				DAILY TRAFFIC VOLUME					
							FUTURE (2015)		
STREET SEGMENT	STREET CLASSIFICATION	DAILY CAPACITY	DIRECTION	EXISTING	PROJECT ONLY	EXISTING PLUS PROJECT	WITHOUT PROJECT	WITH PROJECT	Significant Project Impact
Kenilworth Ave. between			NB	476	597	1,073	486	1,083	
Harvard St. and Colorado St.	Local	2,500	SB	316	0	316	322	322	NO
			Total	792	597	1,389	808	1,405	
Harvard St. between			EB	771	0	771	786	786	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	506	0	506	516	516	NO
			Total	1,277	0	1,277	1,302	1,302	
Oak St. between			EB	350	597	947	357	954	
Kenilworth Ave. and Pacific Ave.	Local	2,500	WB	305	0	305	311	311	NO
			Total	655	597	1,252	668	1,265	

* Project outbound trips to northbound Pacific Ave., eastbound Colorado St. and southbound Pacific Ave. via Oak St.

KOA CORPORATION
12/27/2013
DRAFT

507-525 W. Colorado Street Mixed Use Project, Glendale
Deli=1ksf, Med Office=75ksf

Existing Plus Project (With Full Access Allowed at Project Driveway)

No.	Study Intersection	Peak Hour	Existing		Existing Plus Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.471	A	0.475	A	0.004	NO
		PM	0.553	A	0.578	A	0.025	NO
2	Pacific Ave. & Colorado St.	AM	0.748	C	0.761	C	0.013	NO
		PM	0.799	C	0.812	D	0.013	NO

Existing Plus Project (With LeftTurn Outbound at Project Driveway Prohibited)

No.	Study Intersection	Peak Hour	Existing		Existing Plus Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.471	A	0.475	A	0.004	NO
		PM	0.553	A	0.578	A	0.025	NO
2	Pacific Ave. & Colorado St.	AM	0.748	C	0.761	C	0.013	NO
		PM	0.799	C	0.808	D	0.009	NO

507-525 W. Colorado Street Mixed Use Project, Glendale

Deli=1ksf, Med Office=75ksf

Future 2015 With Project (WITH FULL ACCESS ALLOWED AT PROJECT DRIVEWAY)

No.	Study Intersection	Peak Hour	Future Without Project		Future With Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.573	A	0.577	A	0.004	NO
		PM	0.654	B	0.672	B	0.018	NO
2	Pacific Ave. & Colorado St.	AM	0.848	D	0.860	D	0.012	NO
		PM	0.903	E	0.916	E	0.013	NO

Future 2015 With Project (WITH LEFT TURN OUTBOUND AT PROJECT DRIVEWAY PROHIBITED)

No.	Study Intersection	Peak Hour	Future Without Project		Future With Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Kenilworth Ave./Colorado St. Frwy Ext. & Colorado St.	AM	0.573	A	0.577	A	0.004	NO
		PM	0.654	B	0.672	B	0.018	NO
2	Pacific Ave. & Colorado St.	AM	0.848	D	0.860	D	0.012	NO
		PM	0.903	E	0.912	E	0.009	NO

Queue Analysis - Medical Office (75,000 sf)

Scenario 1

Location	Time Period	Queue Length in Feet			
		Existing	Existing Plus Project	Future Without Project	Future With Project
Colorado Street Freeway Extension	AM	0	0	0	0
at Colorado Street	PM	9	13	101	115

Scenario 2 - Project Access Alternative

Location	Time Period	Queue Length in Feet			
		Existing	Existing Plus Project Alternative Access	Future Without Project	Future with Project Alternative Access
Colorado Street Freeway Extension	AM	0	0	0	0
at Colorado Street	PM	9	13	101	115

507-525 W Colorado St Medical Office Project
Scenario 1: Existing with Project

AM Peak Hour
Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	522	917	167	786	46
v/c Ratio	0.07	0.46	1.00	0.19	0.41	0.05
Control Delay	27.6	5.5	39.7	4.5	0.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	5.5	39.7	4.5	0.6	0.1
Queue Length 50th (ft)	3	13	~87	15	0	0
Queue Length 95th (ft)	14	47	m#259	m23	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	118	1140	915	863	1927	999
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.46	1.00	0.19	0.41	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

	↗	→	↙	←	↗	↙
Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	662	1178	220	1211	23
v/c Ratio	0.08	0.57	1.06	0.23	0.66	0.02
Control Delay	30.6	7.5	69.5	9.2	2.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	7.5	69.5	9.2	2.3	0.0
Queue Length 50th (ft)	3	25	~272	42	0	0
Queue Length 95th (ft)	16	66	#386	78	13	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	109	1154	1109	937	1841	938
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.57	1.06	0.23	0.66	0.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	551	1228	177	958	47
v/c Ratio	0.08	0.52	0.96	0.18	0.48	0.05
Control Delay	33.0	7.0	41.1	8.1	0.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	7.0	41.1	8.1	0.8	0.1
Queue Length 50th (ft)	3	17	260	33	0	0
Queue Length 95th (ft)	16	56	#396	62	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	101	1057	1275	1003	1983	974
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.52	0.96	0.18	0.48	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	700	1451	227	1621	23
v/c Ratio	0.10	0.73	1.02	0.21	0.82	0.03
Control Delay	36.1	17.3	53.6	8.0	6.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	17.3	53.6	8.0	6.9	0.0
Queue Length 50th (ft)	4	70	~356	44	36	0
Queue Length 95th (ft)	18	131	#502	77	115	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	94	965	1419	1056	1973	919
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.73	1.02	0.21	0.82	0.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

	↗	→	↙	←	↖	↑	↘	↓	↙
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	154	847	79	1047	132	388	59	513	300
v/c Ratio	0.83	0.68	0.40	0.87	1.02	0.41	0.38	0.94	0.79
Control Delay	53.0	24.1	18.2	32.4	122.5	20.7	39.4	54.7	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	24.1	18.2	32.4	122.5	20.7	39.4	54.7	21.2
Queue Length 50th (ft)	41	172	20	234	~64	67	26	231	0
Queue Length 95th (ft)	#120	235	44	#348	#170	106	62	#417	#107
Internal Link Dist (ft)		151		661		529		706	
Turn Bay Length (ft)	100		105		80		105		
Base Capacity (vph)	185	1238	199	1205	130	945	157	544	382
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.68	0.40	0.87	1.02	0.41	0.38	0.94	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

507-525 W Colorado St Medical Office Project
Scenario 1: Future with Project

PM Peak Hour
3: Colorado Street & Pacific Avenue

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	222	1480	84	1351	125	523	137	397	227
v/c Ratio	0.97	0.91	0.55	0.95	0.87	0.77	0.73	0.96	0.62
Control Delay	74.1	33.0	25.0	41.4	89.5	40.1	62.7	71.2	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.1	33.0	25.0	41.4	89.5	40.1	62.7	71.2	13.5
Queue Length 50th (ft)	78	396	22	379	72	140	77	224	0
Queue Length 95th (ft)	#222	#553	#48	#534	#173	#200	#167	#403	67
Internal Link Dist (ft)		151		661		529		706	
Turn Bay Length (ft)	100		105		80		105		
Base Capacity (vph)	229	1619	154	1418	144	683	187	414	369
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.91	0.55	0.95	0.87	0.77	0.73	0.96	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

507-525 W Colorado St Medical Office Project
Scenario 2: Existing with Project

AM Peak Hour
Kenilworth Ave. - Colorado St Fwy Ext. / Colorado St.

	↗	→	↙	←	↗	↙
Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	522	917	170	786	46
v/c Ratio	0.07	0.46	1.00	0.20	0.41	0.05
Control Delay	27.6	5.5	40.3	4.5	0.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	5.5	40.3	4.5	0.6	0.1
Queue Length 50th (ft)	3	13	~92	15	0	0
Queue Length 95th (ft)	14	47	m#259	m24	0	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	118	1140	915	862	1927	999
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.46	1.00	0.20	0.41	0.05

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Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	9	662	1178	288	1211	23
v/c Ratio	0.08	0.57	1.06	0.31	0.66	0.02
Control Delay	30.6	7.5	69.5	8.6	2.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	7.5	69.5	8.6	2.3	0.0
Queue Length 50th (ft)	3	25	~272	49	0	0
Queue Length 95th (ft)	16	66	#386	92	13	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	109	1154	1109	926	1841	938
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
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Lane Group	EBL	EBT	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	8	551	1228	180	958	47
v/c Ratio	0.08	0.52	0.96	0.18	0.48	0.05
Control Delay	33.0	7.0	41.1	8.0	0.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	7.0	41.1	8.0	0.8	0.1
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Intersection Summary

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Lane Group Flow (vph)	9	700	1451	295	1621	23
v/c Ratio	0.10	0.73	1.02	0.28	0.82	0.03
Control Delay	36.1	17.3	53.6	7.5	6.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	17.3	53.6	7.5	6.9	0.0
Queue Length 50th (ft)	4	70	~356	51	36	0
Queue Length 95th (ft)	18	131	#502	91	115	0
Internal Link Dist (ft)		304		519		
Turn Bay Length (ft)	80		190			
Base Capacity (vph)	94	965	1419	1039	1973	919
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.73	1.02	0.28	0.82	0.03

Intersection Summary

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Queue shown is maximum after two cycles.

APPENDIX 6.0

Geology and Soils Report

Rybak Geotechnical, Inc. Consulting Engineers

16022 Arminta Street, Ste. #7, Van Nuys, California 91406 • (818) 785-0550 • Fax (818) 785-0440

Geotechnical Engineering Investigation
Proposed Colorado Mixed Use Project
507 – 525 W. Colorado Street, Glendale, California

For

CMGT CONSTRUCTION COMPANY

Project No. 2470 **October 4, 2013 (Rev. October 9, 2013)**

Rybak Geotechnical, Inc.

Consulting Engineers

16022 Arminta Street, Ste. #7, Van Nuys, California 91406 • (818) 785-0550 • Fax (818) 785-0440

October 4, 2013 (Revised October 9, 2013)
Project No. 2470

CMGT Construction Company
535 W. Colorado Street
Glendale, California 91204

Attn: Gregory Tan
Project Manager

Dear Mr. Tan:

We are pleased to submit our report on a geotechnical engineering investigation performed for the proposed Colorado Street Mixed-Use project to be located at 507 through 525 W. Colorado Street, in the City of Glendale, California. Our geotechnical engineering conclusions and recommendations are presented in this report.

Three wet-signed, wet-stamped copies of the report, along with an emailed PDF copy, have been transmitted herewith. It should be noted that no copies of this report have been submitted by us to any other individuals or agencies. Please review the report; if satisfactory, distribute the unbound copies to the applicable agencies and pay any required filing fee. To the best of our knowledge, three wet-signed/wet-stamped copies, along with a PDF copy on CD, should be submitted to the City of Glendale Building Department. Should you have any questions regarding the report or this submittal, please do not hesitate to call.

Respectfully submitted,
RYBAK GEOTECHNICAL, INC.

RICHARD RYBAK
President

TABLE OF CONTENTS

INTRODUCTION

This report presents the results of the geotechnical engineering investigation performed for the proposed Colorado Street Mixed-Use project to be located at 507 through 525 W. Colorado Street, in the City of Glendale, California. The objectives of the investigation were to evaluate the soil conditions at the site and to provide geotechnical engineering recommendations for design and construction of the proposed development. The design of the proposed project is still very preliminary. This office should be kept informed of all design revisions so that the recommendations contained herein can be appropriately revised, if necessary.

The scope of our services included subsurface exploration and sampling, field percolation testing, laboratory testing, engineering analysis, review of pertinent geologic and geotechnical literature, and preparation of this report. Results of the subsurface exploration and laboratory testing are provided in the Appendix.

INTENT

It is the intent of this report to aid in the design and completion of the proposed project. Implementation of the "Conclusions and Recommendations" section of this report is intended to reduce certain geotechnical risks associated with construction of the project. The professional opinions and geotechnical advice contained in this report are subject to the general conditions described in the "Limitations" section of this report.

SITE DEVELOPMENT

The scope of the proposed development was provided by the client, CMGT Construction Company. This office was provided with a document entitled, *Design Package – Stage 1 Submittal – June 2013.*

It is our understanding that the proposed project will include a five-story building over two levels of subterranean parking garage. The top 4 stories are to consist of apartments, with the street level consisting of retail/commercial. The subterranean parking garage is anticipated to be up to 25 feet below existing surface grade.

Column loads are anticipated to be on the order of 700 kips, dead plus live load. Wall loads are anticipated to be on the order of 6 to 13 kips per linear foot. Grading is anticipated to consist of excavating up to 25 feet for the lowest garage level. A Plot Plan indicating the proposed project is included in the Appendix.

SITE DESCRIPTION

The subject site is located along the north side of Colorado Street, just west of Pacific Avenue, in the City of Glendale. The project site consists of four continuous parcels, the addresses are: 525 W. Colorado Street, 523 W. Colorado Street, 515 W. Colorado Street, and 507 W. Colorado Street.

The project site is bound on the south by West Colorado Street, and on the west by an existing three story commercial building, on the north by four existing single family units and two three story multi-family buildings, and on the east by an existing gas station. The site is 0.99 acres (43,125 square feet) and is developed with one single story commercial building and a child care day center, surface parking lots, and a vacant paved lot.

Vegetation on the subject site consists of sparse grasses, shrubs and trees typical to a well-established commercial area. Surface drainage on the subject site is by sheetflow towards the street.

EXPLORATION

Subsurface exploration at the subject site was performed on September 17, 2013, and consisted of the excavation of six borings to depths ranging between 31.5 and 51.5 feet below existing surface grade. The borings were excavated with the aid of a truck-mounted, hollow-stem auger drilling machine equipped with 8-inch diameter, continuous-flight augers.

The earth materials encountered during exploration were logged by the field engineer and classified by visual examination in accordance with the Unified Soil Classification System. Relatively undisturbed samples of the earth materials were obtained with the aid of a thin wall sampler. The sampler was driven with impact from a 140-pound hammer free-falling a distance of 30 inches. The soil was retained in brass rings of 2.5-inch outside diameter and 1.0-inch height. Bulk samples of the soils were collected in the borings.

Upon completion of sampling, each boring was backfilled with the spoils and tamped. The boring locations are indicated on the enclosed Plot Plan and the soils encountered are shown on the exploration logs, Plates A-1 through A-11 in the Appendix.

PERCOLATION TESTING

Percolation testing was performed within boring B2. On September 17, 2013, the boring was excavated to a depth of 35 feet with the aid of a truck-mounted, hollow-stem auger drill rig. Subsequent to excavation and pulling of the augers, the bottom and sides of the boring were carefully scratched to eliminate any smeared or sealed surfaces and provide a natural soil interface into which water may percolate. Subsequently, six inches of coarse sand were placed at the bottom of the boring. Casing, consisting of perforated pipe wrapped in filter fabric, was placed in the boring and the annulus filled with coarse sand. The boring was then filled with water up to 5 feet above the bottom of the hole for overnight presoaking. The next day, September 18, 2013, it was observed that there was no water left in the boring. Testing was commenced by adding water to a depth of 5 feet above the bottom of the casing. The drop in water level was measured at 30 minute intervals for a duration of 4 hours. At the end of each 30 minute interval, water was added to bring the water level back to a depth of 5 feet above the casing tip. The drop in water level that occurred during the final time interval was used to calculate the percolation rate. Observations indicate that the water disappeared prior to the end of each 30 minute interval.

LABORATORY TESTING

Representative samples of the site soils were transported to the laboratory and tested to determine pertinent geotechnical engineering properties. The results of the laboratory tests performed are summarized in the Appendix.

The dry density and moisture content were determined for the soils collected by the ring sampler. The dry unit weights and moisture contents are provided on the logs, Plates A-1 through A-11, and on Table 2 in the Appendix.

A total of four direct shear tests were performed with the purpose of establishing the shear strength of the soils. The tests were performed on relatively undisturbed samples of the natural soils. Two of the samples were tested at their insitu moisture contents, while the remaining two samples were artificially saturated prior to testing. The method of testing was in conformance with ASTM D 3080. The shear tests were performed with a strain-controlled device. Samples were subjected to shearing forces under normal stresses of 1.0, 2.0, and 3.0 kips per square foot. The results of the direct shear tests are provided on Plates B-1 through B-4 in the Appendix.

Six consolidation tests were performed on relatively undisturbed samples of the site soils to determine the load-settlement characteristics of the soils at their field moisture content and in a saturated condition. The method of testing was in conformance with ASTM D2435. The results of the consolidation tests are provided on Plates C-1 through C-6 in the Appendix.

The relationship between water content and dry unit weight (compaction curve) of the surficial soils was determined by performing a compaction test on a bulk sample in conformance with ASTM D 1557. The results are provided on Table 3 in the Appendix.

An expansion index test was performed on a bulk sample representing the existing surficial earth materials. The test was performed in accordance with ASTM 4829 to assess soil expansion potential during changes in moisture content. The results of the expansion index test are provided on Table 3 in the Appendix.

Testing was also performed on representative samples of the soils to determine corrosion potential. Resistivity, pH, water-soluble sulfate and chloride content were determined in conformance with California Test Methods 643, 417, and 422, respectively. The results of the corrosion tests are provided on Plate D in the Appendix.

SUBSURFACE CONDITIONS

EARTH MATERIALS

Up to one foot of existing fill was encountered in the six borings excavated on the subject site. The existing fill consists of silty sand, which is brown, moist, medium-dense, fine to medium-grained, and contains some gravel.

The underlying natural soils consist predominantly of sand, silty sand, and sandy silt which are light to medium-brown, tan-brown, moist, medium-dense to very dense and stiff with increasing depth, fine to coarse-grained, and contain varying amounts of gravel and cobbles. Drilling was difficult at varying depths due to encounter with abundant oversized gravel, cobbles, and possibly boulder-size rocks.

GROUNDWATER

No groundwater was encountered during our exploration to the total depth of 51-1/2 feet. As part of this investigation, the referenced document entitled *Seismic Hazard Evaluation of the Burbank 7.5-Minute Quadrangle, Los Angeles County, California* was reviewed. Plate 1.2 from this document shows the historically highest ground water contours for this quadrangle, with the contours representing the depth to ground water in feet. According to Plate 1.2, the historically highest groundwater level in the immediate area of the subject project was at a depth of between 65 and 70 feet below existing surface grade.

FAULTING AND SEISMICITY CONSIDERATIONS

GENERAL

Based on criteria established by the California Geological Survey (CGS), faults may be categorized as active, potentially active or inactive. Active faults are those which show evidence of surface displacement within the last 11,000 years (Holocene-age). Potentially-active faults are those that show evidence of last displacement within the last 1.6 million years (Quaternary-age). Faults showing no evidence of displacement within the last 1.6 million years may be considered inactive for most purposes, except for some critical structures.

In 1972, the Alquist-Priolo Special Studies Zones Act (now known as the Alquist-Priolo Earthquake Fault Zoning Act) was passed into law. The Act defines "active" and "potentially active" faults utilizing the same aging criteria as that used by the CGS, above. However, the established policy is to zone only those potentially active faults that have a relatively high potential for ground rupture. Therefore, not all faults termed "potentially active" by the CGS are zoned under the Alquist-Priolo Act. The subject site is not located within any of the state's Alquist-Priolo Earthquake Fault Zones. In addition, no known, mapped active or potentially active faults traverse through the site.

The closest known, mapped fault to the subject site is the Verdugo fault, located about 1-1/2 miles to the northeast. Other known, mapped faults within close proximity of the site include the Hollywood-Raymond fault, located about 2 miles to the south, the Sierra Madre-San Fernando fault, located about 6 miles to the northeast, the Newport-Inglewood fault zone, located about 10.5 miles to the southwest the Whittier-North Elsinore fault, located about 15 miles to the southeast, and the San Andreas fault, located about 26 miles to the northeast.

Seismic sources other than faults with known surface expression are so-called "buried thrust faults". These faults are not exposed at the surface and are typically broadly defined based on the analysis of seismic wave recordings of several hundreds of small earthquakes in the southern California area.

Two major buried thrust faults in the Los Angeles area are the Elysian Park fold and thrust belt and the Torrance-Wilmington fold and thrust belt. It is postulated that the Elysian Park structure was responsible for the magnitude 5.9, October 1, 1987 Whittier Narrows earthquake. It is postulated that the Torrance-Wilmington structure was responsible for the magnitude 5.0, January 19, 1989 Malibu earthquake. It is believed that the magnitude 6.7, January 17, 1994 Northridge earthquake was caused by a blind section of the Oak Ridge system located beneath the San Fernando Valley.

Due to the buried nature of these thrust faults, their existence is usually not known until they produce an earthquake. The risk for surface rupture potential of these buried thrust faults is inferred to be low. However, the seismic risk of these buried structures in terms of recurrence and maximum potential magnitude, is not yet well established. Therefore, the potential for surface rupture on these surface-verging splays at magnitudes higher than 6.0 cannot be totally precluded.

SITE SEISMICITY

Being located in southern California, the subject site has been subject to ground shaking in the past on numerous occasions. The site, as all of the southern California area, is located in a seismically active region and will experience slight to intense ground shaking as the result of movement along various active faults in the region.

SEISMIC HAZARDS

FAULT RUPTURE

The results of geologic literature research indicate that the subject site is not underlain by any known, mapped active or potentially active fault deemed capable of rupturing the surface. The site is not located within any Alquist-Priolo Earthquake Fault Zone. The potential for fault rupture on this site is considered remote.

LIQUEFACTION

Groundwater was not encountered during exploration on the site to total depths of 51-1/2 feet below existing surface grade. In addition, review of historic data suggests the shallowest, historic depth to groundwater beneath the site was on the order of 65 to 70 feet. The subject site ***is not*** located within a potential liquefaction zone per the *Seismic Hazard Evaluation of the Burbank 7.5-Minute Quadrangle, Los Angeles County, California.* Due to the relatively deep groundwater and the dense nature of the underlying soils, the potential for liquefaction occurring beneath the subject site is considered to be very low.

LANDSLIDING

The subject site ***is not*** located within a potential earthquake-induced landslide zone per the *Seismic Hazard Evaluation of the Burbank 7.5-Minute Quadrangle, Los Angeles County, California.* Due to the relatively level nature of the site, the potential for seismically-induced landsliding is considered remote.

DYNAMIC SETTLEMENTS

Seismically-induced settlement or compaction of dry or moist, cohesionless soils can also be a secondary effect of earthquake ground motion. Such settlements are typically most damaging when the settlements are differential in nature across the length of structures.

Some seismically-induced settlement of the proposed structure should be expected as a result of strong ground shaking, however, due to the relatively dense and uniform nature of the soils, excessive differential settlements are not anticipated on this site.

CONCLUSIONS AND RECOMMENDATIONS

GENERAL

Development of the site is considered feasible from a geotechnical engineering standpoint, provided the following recommendations are implemented during design and construction. The design of the proposed project is still preliminary. This office should be kept informed of all design revisions so that the recommendations contained herein can be appropriately revised, if necessary.

The subject site is generally underlain by a thin mantle of existing fill underlain by relatively granular alluvial sands and silty sands with minor amounts of sandy silt and varying amounts of gravel and cobbles. The alluvial earth materials become denser with depth. The granular soils are generally friable and prone to caving and raveling. The contractor should anticipate difficulty with caving and oversize rocks during excavation of soldier piles and tie-back anchors. Shored excavations will require complete lagging. Groundwater was not encountered during our exploration to the total depth of 51-1/2 feet, and is not anticipated to be a problem during the construction of the proposed project.

The proposed building may be supported on shallow, conventional footings supported in the undisturbed natural soils. The garage floor slab may be supported on either properly compacted fill or the competent, undisturbed natural soils. Prior to casting floor slabs the exposed subgrade soils should be compacted utilizing a large vibratory compactor.

INFILTRATION PIT

The infiltration rates determined during field testing were reduced by an area reduction factor of 3, to account for exfiltration occurring through the sides of the boring. The infiltration determined during field testing is expected to decline as sediment accumulates in the infiltration layer. The field infiltration rate should be further adjusted by a safety factor of 1.5 to accommodate both suitability assessment related considerations and design related considerations.

In summary, the design infiltration rate has been determined by dividing the field infiltration rate by a factor of 4.5.

A design percolation rate of 26 inches per hour may be utilized in design of the infiltration system. This design percolation rate is in excess of 0.5 inches per hour, which is the minimum allowable percolation rate for an infiltration system. It is the opinion of the undersigned that an infiltration pit(s) is an applicable type of system for use on this project for removing collected storm water. It is anticipated that infiltration pits will be installed within the basement level, beneath the lowest garage slab-on-grade. It is recommended that all infiltration devices be kept away at least 15 horizontal feet from foundations. The infiltration device should be designed in such a fashion that water is not allowed to percolate in the soils above a depth of 3 feet beneath the surface of the basement subgrade soils.

During construction, the excavation for the infiltration device should be observed by this office to confirm the presence of soils suitable for percolation. Additionally, precautions should be taken so that water does not percolate into any existing utility trench backfill that is exposed during excavation. Precautions may include deepening of the excavation.

SEISMIC DESIGN CONSIDERATIONS

Although no known active faults traverse through the subject site, like most of Southern California, the subject site lies within a seismically active area. Earthquake resistant structural design is recommended. Designing structures to be earthquake-proof is generally considered to be impractical, especially for private projects, due to cost limitations. Significant damage to structures may be unavoidable during large earthquakes. The structural design of the proposed structures should be based on the 2010 California Building Code (CBC). The following minimum seismic parameters should be used:

- Site Classification = Site Class D
- Mapped, short period Acceleration Parameter, $S_s = 2.139$
- Mapped Acceleration Parameter at 1.0 second period, $S_1 = 0.669$
- Site Coefficient, $F_a = 1.0$

- Site Coefficient, $F_v = 1.5$
- Mapped MCE Spectral Response Acceleration at Short Periods, $S_{ms} = 2.139$
- Mapped MCE Spectral Response Acceleration at 1 sec Period, $S_{m1} = 1.003$
- Design Earthquake Spectral Response Acceleration Parameter at Short Period, $S_{ds} = 1.426$
- Design Earthquake Spectral Response Acceleration Parameter at 1-sec Period, $S_{d1} = 0.669$
- Seismic Design Category = D

These minimum code values are intended to protect life and may not provide an acceptable level of protection against significant cosmetic damage and serious economic loss. A significantly higher than code lateral design parameter would be necessary to further reduce potential economic loss during a major seismic event. Structural engineers, however, often regard higher than code values as impractical for use in structural design. The structural engineer and project owner must decide what level of risk is acceptable and to assign appropriate seismic values for use in structural design. The risk of damage to the structure due to a large earthquake cannot be totally eliminated, and obtaining appropriate insurance as a mitigation measure is strongly recommended.

CONVENTIONAL FOUNDATIONS

Design

Shallow, conventional footings may be utilized for foundation support, provided they are embedded into the undisturbed natural soils. Continuous wall footings ***located no shallower than 10 feet from the existing surface grade*** may be designed for an allowable bearing capacity of 3,500 pounds per square foot, and should be a minimum of 12 inches in width and 18 inches in depth below the lowest adjacent grade. The proposed isolated pad footings founded in the undisturbed natural soils found at a depth deeper than 10 feet below existing surface grade may be designed for an allowable bearing capacity of 4,000 pounds per square foot, and should be a minimum of 24 inches in width and 18 inches in depth below the lowest adjacent grade. For each one foot increase in width or depth over the aforementioned minimum widths and depths, the above allowable bearing capacities may be increased by 250 pounds per square foot. A maximum allowable bearing value of 6,500 pounds per square foot should not be exceeded.

All wall and isolated footings ***located at a depth of less than 10 feet below surface grade*** and founded in the undisturbed natural soils may be designed for a maximum allowable bearing value of 2,500 pounds per square foot. Wall footings should be a minimum width of 12 inches and embedded a minimum of 18 inches into the undisturbed natural soils. Pad footings should be a minimum of 24 inches in width and embedded a minimum of 18 inches into the undisturbed natural soils. A maximum allowable bearing capacity of 2,500 pounds per square foot should not be exceeded, regardless of widening or deepening of footings.

A one-third increase in the above allowable bearing values may be utilized for wind or seismic loads. The recommended bearing values are net values, and the weight of the concrete in the footings may be taken as 50 pounds per cubic foot, and the weight of the soil backfill may be neglected when determining the downward loads.

Resistance to Lateral Loading

Resistance to lateral loading may be provided by soil friction and by the passive resistance of the competent natural soils. A coefficient of friction of 0.4 may be used between footings and the competent natural soils. The passive resistance of the competent natural soils may be assumed to be 300 pounds per cubic foot, to a maximum of 3,000 pounds per square foot.

Settlement

A majority of the static settlement of the new foundations is expected to occur upon initial loading. The settlement of the new foundations is not anticipated to exceed 1/2 inch. Differential settlements between adjacent structural elements is not expected to exceed 1/4 inch.

Installation

To provide proper foundation support, new footings should not surcharge any materials other than properly controlled fill or undisturbed natural soils. Proper footing depth may be determined by extending an imaginary 1:1 plane downward from the bottom edges of the new footings. Proper footing depth is achieved when all of the following conditions are met:

- The bottom of footing is embedded the recommended depth below lowest adjacent grade and into the recommended bearing material.
- The imaginary plane is below any unsuitable soils or existing structures and only properly controlled fill or undisturbed natural soils are intersected by the extended plane.
- For footings supported on compacted fill, the lateral extent of compacted fill beyond the limits of the footings should be a minimum of the depth of compacted fill below the footing, or three feet, whichever is more.

All footing excavations should be cleaned of loose soil and debris and inspected and approved by the geotechnical engineer prior to the placement of reinforcing steel, concrete forms, or concrete. The bottoms of footings should be properly wetted prior to pouring concrete to eliminate any shrinkage cracks. The geotechnical engineer should verify that the footing will penetrate into the recommended bearing material. Any required footing backfill should be mechanically compacted; flooding or jetting with water is not permitted.

RETAINING WALLS

Restrained Design

Basement retaining walls which are considered restrained from movement at the top are anticipated to be up to 25 feet in height. Restrained retaining walls should be designed for a minimum, at-rest equivalent fluid pressure of 62 pounds per cubic foot, assuming a level backslope. Additional pressure should be added for a surcharge condition due to adjacent structures or vehicular traffic. In addition to the recommended earth pressure, the upper ten feet of the basement walls adjacent to vehicular traffic should be designed to resist a uniform lateral pressure of 100 pounds per square foot, acting as a result of an assumed 300 pounds per square foot surcharge behind the walls due to traffic. If the traffic is kept back at least ten feet from the basement walls, the traffic surcharge may be neglected.

Retaining walls may be supported on conventional, shallow footings designed in conformance with the recommendations presented in the "Conventional Foundations" section of this report.

For retaining walls in excess of 12 feet in height, additional lateral seismic loading should be applied due to earthquake motions. Using the Mononobe-Okabe method, assuming a k_h = $(0.5)(S_{DS}/2.5)$, or 0.29, a thrust of $14.1(H)^2$ pounds per one foot length of retaining wall should be applied at a point located 0.6(H) above the base of the retaining wall footing, where H is the height of the retaining wall in feet. This thrust is in addition to the static earth pressure.

Free-Standing Design

Retaining walls which are considered free-standing and not restrained from movement at the top, may be designed for a minimum equivalent fluid pressure 35 pounds per cubic foot. Additional pressure should be added for a surcharge condition due to sloping backslope, vehicular traffic or adjacent structures. This equivalent fluid pressure may be utilized provided the retaining walls are provided with proper subsurface and surface drainage, as recommended within this report.

Wall Drainage

All retaining walls should be provided with a subdrainage system to prevent buildup of storm water, irrigation water, and nuisance or utility water against the back of wall. Typical back-of-wall drainage systems for basements consist of subdrain pipes surrounded by gravel or geotextile drainage composites draped on shored excavations or back of cast walls.

Should pipe and gravel be used, the subdrain pipes should consist of four-inch diameter, perforated pipe embedded in a minimum of one cubic foot per linear foot of gravel wrapped in filter fabric (Mirafi 140N or equivalent). The perforations should point downwards. The subdrains should be placed at the base of the wall and be sloped to drain to appropriate receptacles by gravity. For best results, the pipe should be backfilled with gravel to within 2 feet of the surface.

In lieu of pipe and gravel, a geocomposite drainage blanket (Miradrain 6000 or equivalent) may be utilized against the back of wall. Geocomposites typically consist of waffle-like, plastic drain material covered by filter fabric. Miradrain strips may be placed at a depth starting at about 2 feet below the finish grade. It is recommended that strips at least 4 feet in width be placed at 8-foot centers. The strips should be connected to a continuous 4-foot wide Miradrain strip placed at the bottom of the excavation. The Miradrain should be connected to a solid drainage pipe. As an alternative to the 4-foot wide continuous strip at the bottom of the excavation, a 4-inch diameter perforated pipe may be used. The pipe should be placed with the perforations down and surrounded by at least one cubic foot of gravel wrapped in filter fabric.

The installed drainage system should be observed by personnel from this firm prior to being backfilled. Inspection of the drainage system may also be required by the reviewing governmental agencies.

Moisture seepage or discoloration of the face of retaining walls due to mineral deposits (efflorescence) is common with retaining walls not provided with proper waterproofing. It is recommended that a waterproofing consultant be retained to provide waterproofing recommendations consistent with the level of protection desired.

Wall Backfill

Wall backfill should be mechanically compacted in loose layers not more than 8 inches in thickness, to the proper relative compaction. Flooding or jetting of the backfill is not permitted. Proper compaction of the backfill will be necessary to reduce settlements of the backfill and overlying flatwork.

SITE GRADING

Site Preparation and Compaction

It is anticipated that site grading will consist of excavating up to 25 feet for the basement levels, placement of retaining wall backfill, and removal and recompaction of unsuitable surficial soils for support of at-grade improvements. All new fill should be placed on either undisturbed natural soils or compacted fill previously certified by a soils testing agency. All unsuitable deposits, such as any existing uncertified fill soils, disturbed natural soils, vegetation, and debris, should either be penetrated or removed and replaced by properly compacted fill soils for support of concrete flatwork and additional fill. After excavating as required, the exposed subgrade soils should be carefully inspected by the geotechnical engineer or his representative to verify the removal of all unsuitable deposits. Subsequently, the exposed soils should be scarified to a depth of 6 inches, brought to near optimum moisture content, and compacted to a minimum of 90 percent of maximum dry density obtainable by the ASTM Designation D1557 method of compaction. After compacting the exposed soils, all required fill should be placed in loose lifts not more than 8 inches in thickness, brought to near optimum moisture content, and properly compacted.

Excavation Characteristics

The exploratory borings were excavated with the aid of a truck-mounted, hollow-stem auger drilling machine. Some difficulties in excavation were encountered due to the gravelly and cobbley nature of the soils and increase in density with increasing depth. It is expected that conventional grading equipment can be utilized during construction, however, caving and encounter with gravel, cobbles, and possibly boulders should be anticipated.

Material for Fill

The on-site soils, less any debris or organic matter, may be used in compacted fills. Any required imported fill should be inspected by the geotechnical engineer prior to stockpiling onsite. Imported soils should consist of relatively granular soils with an Expansion Index of less than 20, and be free of vegetation, debris, and deleterious materials. Fill should be free of rocks larger than 6 inches in any dimension.

Utility Trench Backfill

Underground utilities should be provided with proper sand bedding and shading to a minimum of 12 inches above the top of pipe. The remainder of the trench should be properly backfilled with the on-site soils and mechanically compacted in lifts to the applicable minimum relative compaction. Jetting or flooding of backfill materials is not permitted.

Cesspool Abandonment

Any old cesspools encountered on the site during construction should be properly abandoned during grading operations. Cesspools should be completely cleaned out and filled to within 5 feet plus the depth of the future footings with a minimum two-sack slurry mix. The upper portion should be benched into the surrounding natural soils and the fill tested to the proper relative compaction. The entire footing footprint plus 5 feet out from the footing should be underlain by a uniform thickness of compacted fill.

Field Observation

The compaction of all required fill should be observed and tested by a representative of this firm. The observation and testing should include the following:

- ➢ Observe the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished subgrade, observe proofrolling, and delineate areas requiring overexcavation.
- ➢ Perform visual observations to evaluate the suitability of on-site and import soils for fill placement; collect and submit soil samples for required or recommended laboratory testing, where necessary.
- ➢ Perform field density testing to determine the percentage of compaction achieved during fill placement. Verify proper moisture content during grading.

The governmental agencies having jurisdiction over the project should be notified prior to commencement of grading so that the necessary grading permits may be obtained and arrangements may be made for the required inspections.

EXPANSIVE SOILS

The surficial soils are considered to be non-expansive to very low in expansion potential. Special considerations with respect to expansive soils are not required.

SOIL CORROSIVITY

Resistivity, pH, chloride and sulfate test results obtained from a soil sample recovered at the site are presented on Plate D in the Appendix. The minimum electrical resistivity result of 10,935 ohm-centimeters indicates that the soils are mildly corrosive. Consequently, mildly corrosive site conditions should be assumed for metals in direct contact with the soil. A corrosion engineer should be consulted regarding detailed recommendations regarding corrosion protection of underground improvements.

At 40 parts per million, the water-soluble sulfate concentration of the site soil is negligible. As a result, no special precautions would be required for cement to be used at the subject site. Minimum strength and workmanlike concrete construction practices will be sufficient to protect against this low sulfate concentration encountered.

The chloride test indicates a negligible chloride concentration of 65 parts per million in the soil. Consequently, no consideration of additional concrete cover would be necessary for the reinforcing steel.

FLOOR SLABS

The basement garage slabs may be designed as conventional slabs-on-grade, provided they are supported on undisturbed natural soils found at the level of the proposed basement or properly compacted fill placed on these competent natural soils. Any soils disturbed or over-excavated in the area of the new slab should be excavated and replaced with properly compacted fill.

It is recommended that the garage slabs be a minimum of five inches in thickness and reinforced with a minimum of #4 steel bars placed at 16 inch centers, each way. Where a floor covering that would be critically affected by moisture is to be used, it is recommended that the floor slabs be underlain by a minimum 10-mil thick impermeable visqueen membrane. If the membrane is used, a low-slump concrete should be utilized to minimize possible curling of the slab. A two-inch thick layer of sand should be placed between the membrane and the floor slabs. The concrete slabs should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering. Prior to placement of the visqueen membrane or casting of concrete against soil, the soil subgrade should be wetted to eliminate any shrinkage cracks.

In order to decrease the potential for moisture to migrate through the floor slab, it is recommended that a fiber reinforcement additive be added to the concrete mix. This will improve the tensile strength of the concrete and reduce the likelihood of shrinkage cracks from developing. In addition, it is important that any shrinkage cracks that do develop in the floor slab be sealed prior to covering of the slab. Concrete shrinks as it cures, resulting in shrinkage tension within the concrete mass. The development of tension results in cracks within the concrete since concrete is weak in tension. Therefore, the concrete should be placed using procedures to minimize the cracking within the slab. Shrinkage cracks can become excessive if water is added to the concrete above the allowable limit and proper finishing and curing practices are not followed. Concrete mixing, placement, finishing and curing should be performed per the American Concrete Institute Guide for Concrete Floor and Slab Construction (ACI 301.1R-89). Where shrinkage cracks would be unsightly, concrete slabs on grade should be provided with tooled, crack control joints at 10 to 15-foot centers or as specified by the structural engineer.

Tile flooring can crack, reflecting cracks in the concrete slab below the tile. Therefore, the slab designer should consider additional steel reinforcement in concrete slabs on-grade that will directly support tile. The tile installer should consider installation methods that reduce possible cracking of the tile. A vinyl crack isolation membrane (approved by the Tile Council of America/Ceramic Tile Institute) is recommended between tile and concrete slabs-on-grade per the Portland Cement Association Specifications.

Construction activities and exposure to the environment can cause deterioration of prepared subgrades. Therefore, we recommend that our field representative observe the condition of the final subgrade earth materials immediately prior to slab-on-grade construction and, if necessary, perform further field density and moisture content tests to determine the suitability of the final prepared subgrade.

SITE DRAINAGE

Positive surface gradients should be provided adjacent to all structures so as to direct surface water run-off and roof drainage away from foundations and slabs toward suitable discharge facilities. Drainage should not be allowed to pond anywhere on the site. All structures should be provided with roof gutters and downspouts.

TEMPORARY EXCAVATIONS

General

It is anticipated that temporary excavations up to 30 feet in height, including the depth of perimeter footings, will be required during the construction of the subterranean garages. Should the perimeter garage walls be positioned far enough from the property lines, the temporary excavations may be sloped. A uniform 1.5:1 (horizontal to vertical) gradient should not be exceeded. Slope surfaces will need to be protected from excessive ravelling and erosion, especially during wet weather. Shallower gradients will help in preventing sloughing and maintaining the integrity of the sloped excavations throughout the construction period. Due to the cohesion-less, friable nature of the existing soils, vertical excavations are not recommended. Where sloped excavations are not possible, all or portions of the excavations will require shoring. Shoring may consist of drilled soldier piles with wood lagging.

Excavation of the shoring piles, and tie-back anchors if necessary, is anticipated to be difficult due to the presence of oversize rocks and caving.

Where sloped embankments are utilized, the tops of the slopes should be barricaded to prevent vehicles and storage loads within 5 feet of the tops of the slopes. If the temporary construction embankments are to be maintained during the rainy season, berms are suggested along the tops of the slopes where necessary to prevent runoff water from entering the excavation and eroding the slope faces. The soils exposed in the cut slopes can be made if variations in the soil conditions occur. All excavations should be stabilized within 30 days of initial excavation.

Shoring

The following information on the design and installation of the shoring is as complete as possible at this time. It is suggested that a review of the final shoring plans and specifications be made by this office prior to bidding or negotiating with a shoring contractor.

One method of shoring would consist of steel soldier piles, placed in drilled holes and backfilled with concrete. The soldier piles may be braced internally, tied-back, or cantilevered. Due to the potential for ground loss, the installation of tie-back anchors beneath existing foundations is not recommended. Internal raker braces should be utilized in these instances. Cantilevered shoring should be used only for relatively shallow excavations where lateral deflections of the shoring and settlement adjacent to the excavations are not critical.

Drilled, cast-in-place soldier piles should be placed no closer than 2 diameters on center. The minimum diameter of the piles is 18 inches. Structural concrete should be used for the soldier piles below the excavation; lean-mix concrete may be employed above that level. As an alternative, lean-mix concrete may be used throughout the pile where the reinforcing consists of a wide flange section. The slurry must be of sufficient strength to impart the lateral bearing pressure developed by the wide flange section to the soil. For design purposes, an allowable passive value for the soils below the bottom plane of excavation, may be assumed to be 500 pounds per square foot per foot of depth. To develop the full lateral value, provisions should be implemented to assure firm contact between the soldier piles and the undisturbed soils.

Casing may be required should caving be experienced in the granular soils. If casing is used, extreme care should be employed so that the pile is not pulled apart as the casing is withdrawn. At no time should the distance between the surface of the concrete and the bottom of the casing be less than 5 feet.

It is recommended that the exposed soils be observed by the soils engineer to verify the cohesive nature of the soils and the areas where lagging may be omitted. Due to the granular nature of the site soils, it is anticipated that shored excavations will require complete lagging. Soldier piles should be designed for the full anticipated pressures. Due to arching in the soils, the pressure on the lagging will be less. It is recommended that the lagging be designed for the full design pressure but be limited to a maximum of 400 pounds per square foot.

Cantilever soldier piles retaining up to 14 feet with a level back slope may be designed for a minimum equivalent fluid pressure of 28 pounds per cubic foot. Additional pressure should be added for sloped conditions, adjacent traffic, and structural surcharge conditions.

Tied-back shoring, with a level backslope, may be designed for a trapezoidal distribution of pressure of 22H pounds per square foot, with the distribution as shown on Plate 1 in the Appendix.

Because of the depth of the excavation, some means of monitoring the performance of the shoring system is recommended. The monitoring should include ground surface settlement and lateral deformation. Some movement of the shored embankments should be anticipated as a result of the relatively deep excavation. The shoring should be designed for a lateral movement not to exceed 1/2 inch. It is recommended that photographs of the existing improvements on the adjacent properties be made during construction to record any movements for use in the event of a dispute.

Tie-back Anchors

1. Design

Tie-back anchors may be used to resist lateral loads. Friction anchors are recommended. For design purposes, it may be assumed that the active wedge adjacent to the shoring is defined by a plane drawn 35 degrees with the vertical through the bottom plane of the excavation. Friction anchors should extend a minimum of 20 feet beyond the potentially active wedge and to greater lengths if necessary to develop the desired capacities. Only the frictional resistance developed beyond the imaginary plane would be effective in resisting lateral loads. The zone of earth material located between the imaginary plane and the face of the excavation will be termed the active wedge.

The design bond between the tie-back and the surrounding earth materials may be estimated to as 30 H_a pounds per square foot (factor of safety of 2.0 already included in the equation), where H_a is the depth of overburden, in feet, at the midpoint of the anchored portion of the tiebacks. The maximum resistance using this equation should not exceed 900 pounds per square foot. The above equation should be used only as a general guidance. The contractor must determine the appropriate value for bond based on his experience and knowledge with similar projects in similar geologic conditions. The contractor should be responsible for calculating the tie-back length since construction procedure will greatly influence the bond between the earth materials and the grout. For example, caving will loosen the earth materials and cause a significant reduction in the bond. In any event, the computed bond length should be verified by a proof-test program performed under the observation of our representative. Anchors should be placed at least 6 feet on center to be considered isolated.

The actual lengths of the anchors required may be longer than the lengths calculated using the above average skin friction values. Pull-out testing of the anchors should be performed to verify the actual length of anchors required.

2. Anchor Installation

Tied-back anchors may be installed between 20 and 40 degrees below the horizontal. Anchor installation is expected to be made difficult due to the presence of sand and gravel deposits. Caving of the anchor shafts should be anticipated and provisions should be implemented in order to minimize such caving. It is suggested that hollow-stem auger drilling equipment be used to install the anchors. The anchor shafts should be filled with concrete by pumping from the tip out, and the concrete should extend from the tip of the anchor to the active wedge. In order to minimize the chances of caving, it is recommended that the portion of the anchor shaft within the active wedge be backfilled with sand before testing the anchor. This portion of the shaft should be filled tightly and flush with the face of the excavation. The sand backfill should be placed by pumping; the sand may contain a small amount of cement to facilitate pumping.

3. Anchor Testing

All of the anchors should be tested to at least 150 percent of design load. The total deflection during this test should not exceed 12 inches. The rate of creep under the 150 percent test load should not exceed 0.1 inch over a 15 minute period in order for the anchor to be approved for the design loading.

At least ten percent of the anchors should be selected for "quick", 200 percent tests and six additional anchors be selected for 24-hour, 200 percent tests. These tests should be performed prior to installation of additional tiebacks. The purpose of the 200 percent tests is to verify the friction value assumed in design. The anchors should be tested to develop twice the assumed friction value. Where satisfactory tests are not achieved on the initial anchors, the anchor diameter and/or length should be increased until satisfactory test results are obtained.

The total deflection during the 24-hour 200 percent test should not exceed 12 inches. During the 24-hour tests, the anchor deflection should not exceed 0.75 inches measured after the 200 percent test load is applied.

For the "quick" 200 percent tests, the 200 percent test load should be maintained for 30 minutes. The total deflection of the anchor during the 200 percent quick tests should not exceed 12 inches; the deflection after the 200 percent load has been applied should not exceed 0.25 inch during the 30-minute period.

After a satisfactory test, each anchor should be locked-off at the design load. This should be verified by rechecking the load in the anchor. The load should be within 10 percent of the design load. The installation and testing of the anchors should be observed by a representative of this firm.

Internal Bracing

Rakers may be utilized to brace the soldier piles in lieu of tieback anchors. The raker bracing could be supported laterally by temporary concrete footings (deadmen) or by the permanent, interior footings. For design of such temporary footings or deadmen, poured with the bearing surface normal to rakers inclined at 45 degrees, a bearing value of 3,500 pounds per square foot may be used, provided the shallowest point of the footing is at least one foot below the lowest adjacent grade.

PLAN REVIEW

This report was prepared on the basis of exploration, laboratory testing, and analysis of the existing site conditions. Formal plans ready for submittal to the Department of Building and Safety must be reviewed by Rybak Geotechnical, Inc. prior to such submittal. Any change in the scope of the project may require additional geotechnical work.

SITE OBSERVATION

It is recommended that all foundation excavations be observed by the geotechnical engineer's representative prior to placing forms, steel, or concrete. All excavations should be cleaned of loose soil and debris prior to inspection. The excavations should be approved by this office prior to the placement of reinforcing steel, concrete forms, or concrete. The geotechnical engineer should verify that the footings will be embedded into the recommended bearing material. All bottom excavations to receive compacted fill should be inspected by the geotechnical engineer prior to placing any controlled compacted fill. Any fill that is placed must be approved, tested, and verified if used for engineered purposes. Should the observations reveal any unforeseen hazard, additional recommendations may be necessary.

Please advise Rybak Geotechnical, Inc. at least 24 hours prior to any required site visit. All approved plans, permits, and geotechnical reports must be at the jobsite and available during inspections.

CONSTRUCTION SITE MAINTENANCE

The construction contractor or general contractor shall supervise and direct the work and they shall be solely responsible for all construction means, methods, techniques, sequences and procedures.

Also, they shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during the performance of work. Periodic or continuous observations by

the geotechnical consultant will not, nor are intended to, include review of the adequacy of the contractor's safety measures in, on or near the construction site.

It is the responsibility of the contractor to maintain a safe construction site. When excavations exist on a site, the area should be fenced and warning signs posted. Earth material generated by foundation and subgrade excavations should be either removed from the site or properly placed as a controlled compacted fill. Earth material must not be spilled over any descending slope.

Workers should not be allowed to enter any unshored trench excavations over 5 feet deep. All shoring, bracing and excavation or confined space entry should be in accordance with current requirements of CAL/OSHA, the Industrial Accident Commission of the State of California, and all other public agencies having jurisdiction.

Please call this office with any questions. This report and the exploration are subject to the following "Limitations" section. Please read the "Limitations" carefully, as it limits our liability.

LIMITATIONS

This report was prepared in accordance with generally accepted geotechnical engineering principles and practice available at this time and with the degree of care and skill ordinarily exercised under similar circumstances by geotechnical engineers practicing in this area. No other representation, either expressed or implied, is made as to the conclusions and professional advice included in this report.

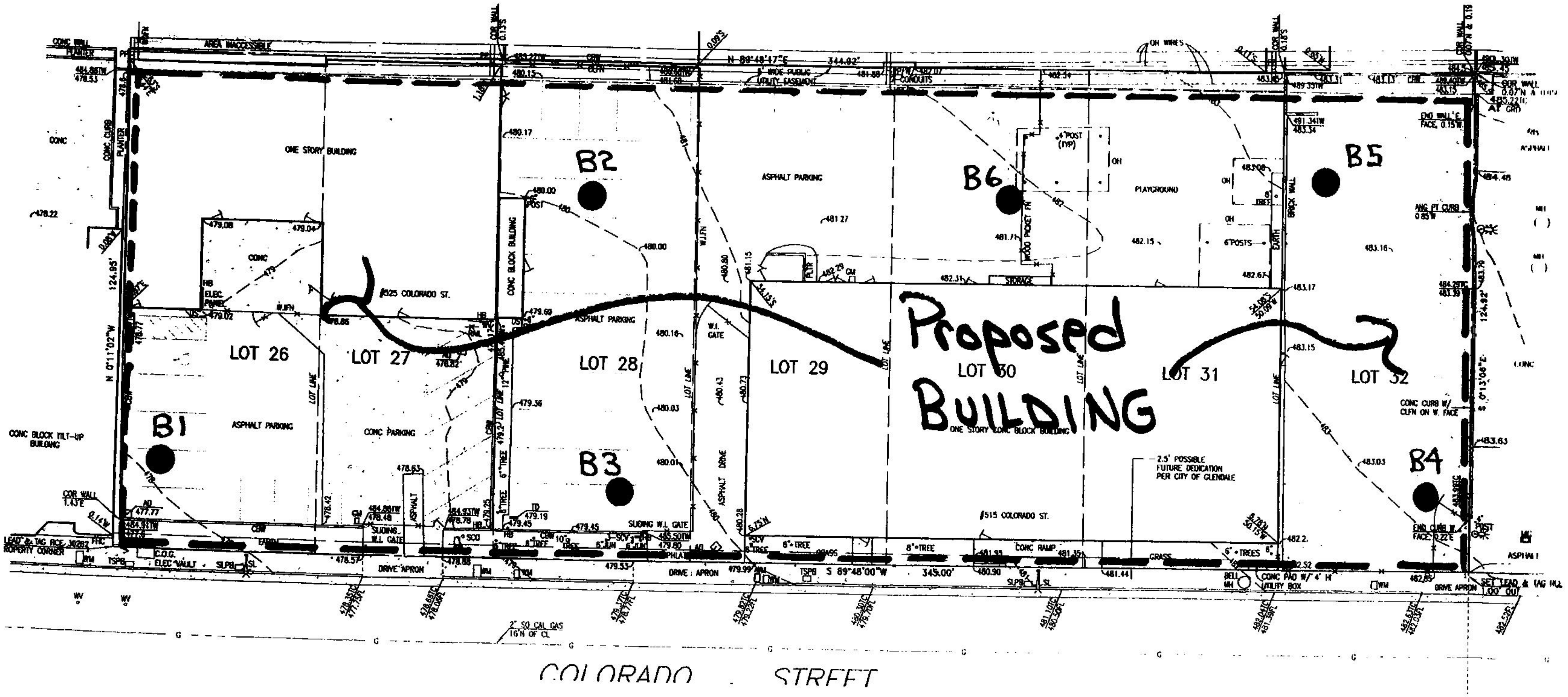
This report was prepared exclusively for the sole use and benefit of the client, CMGT Construction Co., and their authorized agents, and is not transferrable. This report is intended for use with regard to the specific project discussed herein. The conclusions and recommendations contained in this report are based on the data relating only to the project and location discussed herein. Any changes in design or locations of structures from those outlined in this report should be provided to us so that we may review our conclusions and recommendations and make any necessary modifications. The subsurface conditions described in this report have been projected from borings on the site as indicated, and are believed representative of the project area. However, soil, geologic and groundwater conditions can vary significantly between exploratory excavations and with passage of time. As with most projects, conditions revealed during construction may be at variance with the findings herein. If this occurs, the changed conditions must be evaluated by the geotechnical consultant, and additional recommendations provided, as warranted.

The recommendations contained within this report were developed with the assumption that the necessary geotechnical observations and testing will be performed during construction by a representative of this firm. If construction phase services are performed by others, they must accept full responsibility for all geotechnical aspects of the project, including this report.

Respectfully submitted,
RYBAK GEOTECHNICAL, INC.

RICHARD RYBAK
G.E. 2131

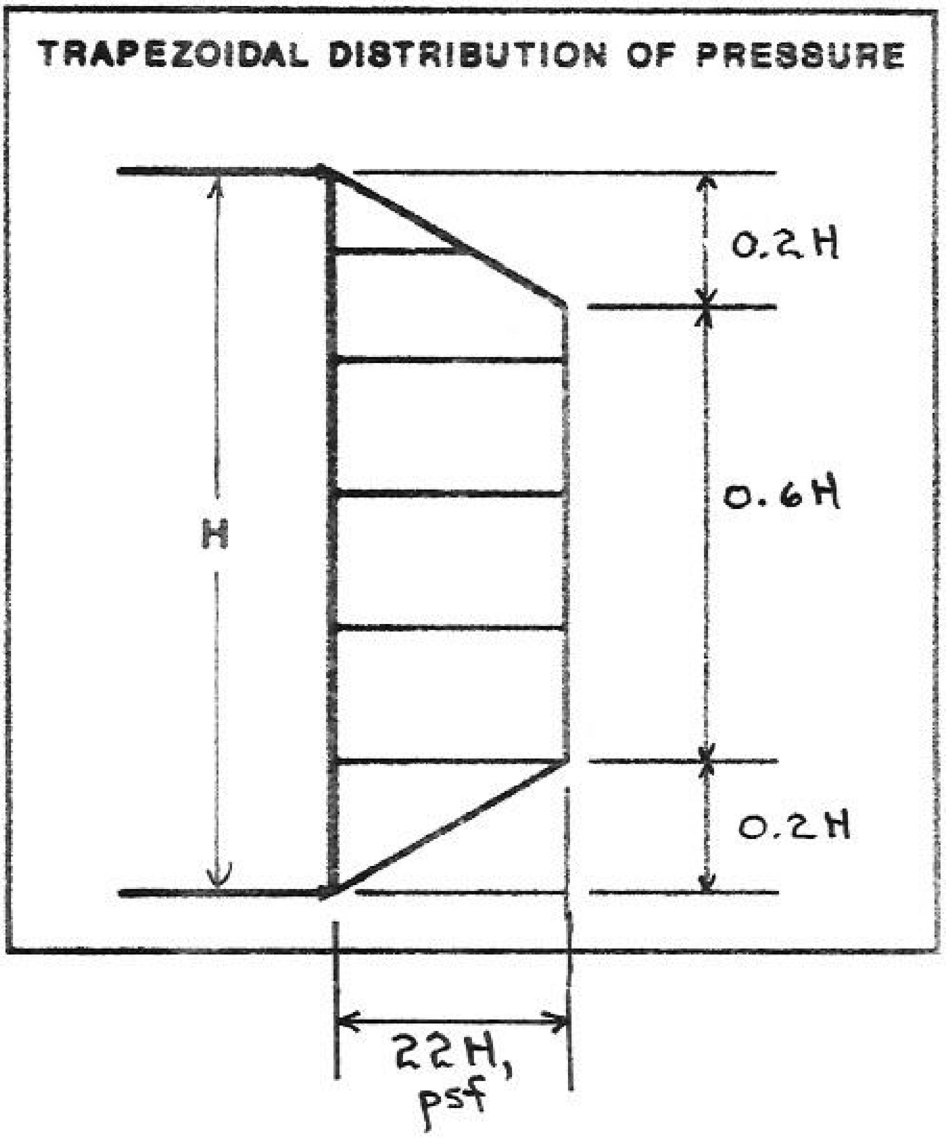
7/31/15



PLOT PLAN

Scale 1" = 30'

Rybak Geotechnical, Inc.
CMGT (Colorado)
#2470
October 4, 2013



TRAPEZOIDAL DISTRIBUTION OF PRESSURE

PLATE 1

RYBAK GEOTECHNICAL, INC.

BORING NO. 1

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions: Relatively level, asphalt paved area
				0		
				1		EXISTING FILL: Silty Sand, brown, moist, medium-dense, fine to medium-grained
				2	SM	NATURAL SOILS: Silty Sand, brown, moist, fine to medium-grained, occasional gravel
				3		
				4		
5.0	20	7.8	108.5	5		
				6		
				7		
				8		
				9	SP	Gravelly Sand, brown, moist, dense, fine to medium-grained
10.0	37	3.5	114.1	10		
				11		
				12		
				13		abundant gravel and cobbles, very dense
				14		
15.0	82 for 11"	3.0	132.7	15		
				16		
				17		
				18		
				19		
20.0	70	3.6	109.6	20		
				21		
				22		
				23		
				24		abundant cobbles, difficult drilling
25.0	50 for 6"	4.6	129.4	25		
				26		
				27		
				28		
				29		
30.0	50 for 5"	2.4	117.5	30		light brown, moist, fine to medium-grained, some gravel

RYBAK GEOTECHNICAL, INC.

BORING NO. 1 (Continued)

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions:
				30 - -		
				31 - -		
				32 - -		
				33 - -		gravelly, tan-brown, very dense, fine to medium-grained
				34 - -		
35.0	50 for 6"	5.5	109.6	35 - -		
				36 - -		
				37 - -		
				38 - -		
				39 - -		
40.0	106 for 11"	9	123.5	40 - -		
				41 - -		
				42 - -		
				43 - -		
				44 - -		
45.0	50 for 6"	5.5	109.9	45 - -		
				46 - -		
				47 - -		
				48 - -		
				49 - -	ML	Sandy Silt, brown, moist, stiff, slightly clayey
50.0	90	15.6	112.1	50 - -		
				51 - -		
				52 - -		
				53 - -		Total Depth: 51.5' No groundwater Fill to one foot
				54 - -		
				55 - -		
				56 - -		
				57 - -		
				58 - -		
				59 - -		
				60 - -		

RYBAK GEOTECHNICAL, INC.

BORING NO. 2

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions: Relatively level A.C. paving
				0 - -	SM	NATURAL SOILS: Silty Sand, brown, moist, fine to medium-grained
				1 - -		
				2 - -		
				3 - -		
				4 - -		
5.0	26	18.0	105.4	5 - -		
				6 - -		
				7 - -		
				8 - -	SW	Gravelly Sand, tan-brown, slightly moist, dense
				9 - -		
10.0	31	6.2	112.5	10 - -		
				11 - -		
				12 - -		
				13 - -		
				14 - -		light brown, fine to medium-grained
15.0	65	3.2	114.3	15 - -		
				16 - -		
				17 - -		
				18 - -		
				19 - -		
20.0	70	1.9	112.6	20 - -		gravelly, medium to coarse-grained
				21 - -		
				22 - -		
				23 - -		
				24 - -		
25.0	50 for 5"	3.1	121.4	25 - -		
				26 - -		
				27 - -		
				28 - -		
				29 - -		
30.0	48	1.9	119.5	30 - -		

RYBAK GEOTECHNICAL, INC.

BORING NO. 2 (Continued)

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions:
				30 - -		
				-		
				31 - -		
				-		
				32 - -		
				-		
				33 - -		
				-		
				34 - -		
				-		
				35 - -		
				-		
				36 - -		
				-		
				37 - -		
				-		Total depth: 35 feet
				38 - -		No groundwater
				-		No Fill
				39 - -		
				-		
				40 - -		
				-		
				41 - -		
				-		
				42 - -		
				-		
				43 - -		
				-		
				44 - -		
				-		
				45 - -		
				-		
				46 - -		
				-		
				47 - -		
				-		
				48 - -		
				-		
				49 - -		
				-		
				50 - -		
				-		
				51 - -		
				-		
				52 - -		
				-		
				53 - -		
				-		
				54 - -		
				-		
				55 - -		
				-		
				56 - -		
				-		
				57 - -		
				-		
				58 - -		
				-		
				59 - -		
				-		
				60 - -		

BORING NO. 3

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions: Relatively level A.C. paving
				0 - -	SM	NATURAL SOILS: Silty Sand, brown, moist, fine to medium-grained
				1 - -		
				2 - -		
				3 - -		
				4 - -		
5.0	18	1.5	111.4	5 - -		
				6 - -		
				7 - -		
				8 - -		
				9 - -		
10.0	22	6.3	115.3	10 - -		
				11 - -		
				12 - -	SW	Gravelly Sand, brown, moist, dense, fine to coarse-grained, friable
				13 - -		
				14 - -		
15.0	57	1.7	116.5	15 - -		
				16 - -		
				17 - -		
				18 - -		
				19 - -		
20.0	37	11.8	112.7	20 - -		
				21 - -	SM	Gravelly, Silty Sand, brown, moist, dense
				22 - -		
				23 - -		
				24 - -		
25.0	50 for 6"	1.2	121.8	25 - -	SW	Gravelly Sand, brown, moist, dense, abundant gravel and cobbles
				26 - -		
				27 - -		
				28 - -		
				29 - -		
30.0	50 for 6"	2.7	112.9	30 - -		

RYBAK GEOTECHNICAL, INC.

BORING NO. 3 (Continued)

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions:
				30 --		
				31 --		
				32 --		
				33 --		
				34 --		
35.0	50 for 6"	2.6	120.5	35 --		
				36 --		
				37 --		
				38 --		
				39 --		Total depth: 36.5 feet No groundwater No Fill
				40 --		
				41 --		
				42 --		
				43 --		
				44 --		
				45 --		
				46 --		
				47 --		
				48 --		
				49 --		
				50 --		
				51 --		
				52 --		
				53 --		
				54 --		
				55 --		
				56 --		
				57 --		
				58 --		
				59 --		
				60 --		

RYBAK GEOTECHNICAL, INC.

BORING NO. 4

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions: Relatively level A.C. paving
				0	SP-SM	NATURAL SOILS: Sand with some silt, light brown, moist, medium-grained, gravelly
				1		
				2		
				3		
				4		
5.0	22	4.9	115.9	5		
				6		
				7	SP	Gravelly Sand, tan, slightly moist, medium to coarse-grained
				8		
				9		
10.0	63	4.3	130.1	10		
				11		
				12		
				13		
				14		
15.0	50 for 6"	1.2	124.2	15		
				16		
				17		
				18	SM	Gravelly, Silty Sand, brown, moist, dense
				19		
20.0	50 for 5"	2.3	104	20		
				21		
				22		
				23		
				24		
25.0	50 for 5"	2.5	118.3	25		
				26		
				27		
				28		
				29		
30.0	50 for 6"	1.6	118.4	30		

RYBAK GEOTECHNICAL, INC.

BORING NO. 4 (Continued)

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions:
				30 - -		
				31 - -		
				32 - -		
				33 - -		
				34 - -		
35.0	50 for 3"	1.3	124.7	35 - -		
				36 - -		
				37 - -		
				38 - -		
				39 - -		Total depth: 36.5 feet No groundwater No Fill
				40 - -		
				41 - -		
				42 - -		
				43 - -		
				44 - -		
				45 - -		
				46 - -		
				47 - -		
				48 - -		
				49 - -		
				50 - -		
				51 - -		
				52 - -		
				53 - -		
				54 - -		
				55 - -		
				56 - -		
				57 - -		
				58 - -		
				59 - -		
				60 - -		

RYBAK GEOTECHNICAL, INC.

BORING NO. 5

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions: Relatively level A.C. paving
				0	ML	NATURAL SOILS: Sandy Silt, pale gray-brown, moist, hard, occasional gravel
				1		
				2		
				3		
				4		
5.0	23	2.7	118.1	5		
				6		
				7	SP	Gravelly Sand, tan, slightly moist, medium to coarse-grained
				8		
				9		
10.0	22	5.6	119.6	10		
				11		
				12		
				13		
				14		light brown, some gravel
15.0	77	2.1	110.8	15		
				16		
				17		
				18	SM	Gravelly, Silty Sand, brown, moist, dense
				19		
20.0	50 for 6"	2.4	120.3	20		
				21		
				22		
				23		
				24		
25.0	50 for 6"	18	108.5	25		
				26		
				27		
				28	SP	Gravelly Sand, light brown, slightly moist, fine to medium-grained
				29		
30.0	50 for 5"	2.5	119	30		

PLATE A-9

RYBAK GEOTECHNICAL, INC.

BORING NO. 5 (Continued)

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions:
				30 - -		
				31 - -		
				32 - -		
				33 - -		
				34 - -		
				35 - -		
				36 - -		
				37 - -		
				38 - -		
				39 - -		
40.0	50 for 6"	4.2	118.5	40 - -		
				41 - -		
				42 - -		
				43 - -		
				44 - -		
				45 - -		
				46 - -		
				47 - -		
				48 - -		
				49 - -		
50.0	67 for 9"	3.9	122.6	50 - -		
				51 - -		
				52 - -		
				53 - -		Total Depth: 51.5' No groundwater No fill
				54 - -		
				55 - -		
				56 - -		
				57 - -		
				58 - -		
				59 - -		
				60 - -		

RYBAK GEOTECHNICAL, INC.

BORING NO. 6

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions: Relatively level, asphalt paved area
				0 - -		
				-		
				1 - -		
				-		
				2 - -		
				-		
				3 - -		
				-		
				4 - -		
				-		
				5 - -		
				-		
				6 - -		
				-		
				7 - -		
				-		
				8 - -		
				-	SP-SM	Sand with Silt, brown, moist, fine-grained sand fraction, occasional gravel
				9 - -		
				-		
10.0	50 for 6"	4.7	117.8	10 - -		
				-		
				11 - -		
				-		
				12 - -		
				-		
				13 - -		
				-		
				14 - -		
				-		
				15 - -		
				-		
				16 - -		
				-		
				17 - -	SP	Sand, brown, moist, dense
				-		
				18 - -		
				-		
				19 - -		
				-		
20.0	50 for 6"	3.4	115.4	20 - -		
				-		
				21 - -		
				-		
				22 - -		
				-		
				23 - -		
				-		abundant gravel and cobbles, brown, medium to coarse-grained
				24 - -		
				-		
				25 - -		
				-		
				26 - -		
				-		
				27 - -		
				-		
				28 - -		
				-		
				29 - -		
				-		
30.0	50 for 6"	2.5	123.9	30 - -		

RYBAK GEOTECHNICAL, INC.

BORING NO. 6 (Continued)

Client: CMGT (COLORADO)
Project No. 2470

Exploration Date: September 17, 2013

Sample Depth, (ft.)	Blows per foot	Moisture Content (%)	Dry Density (lbs/cu.ft.)	Depth (ft.)	Soil Type	Description Surface Conditions:
				30		
				31		
				32		
				33		
				34		
				35		
				36		
				37		
				38		
				39		
40.0	50 for 6"	12.6	113.4	40		
				41		
				42		
				43		
				44		
				45		
				46		
				47		
				48		
				49		
50.0	50 for 6"	3.7	119.5	50		
				51		
				52		
				53		Total Depth: 51.5' No groundwater No fill
				54		
				55		
				56		
				57		
				58		
				59		
				60		

Table 1. Type and Quantity of Laboratory Test

Laboratory Test	Quantity	ASTM Standard
Dry Density	41	-----
Moisture Content	41	D-2216
Consolidation	6	D-2435
Direct Shear	4	D-3080
Compaction	1	D-1557
Expansion Index	1	D-4829
Electrical Resistivity	2	California Test Method 532
pH	2	California Test Method 643
Water-Soluble Sulfate	2	California Test Method 417
Chlorides	2	California Test Method 422

Table 2. Results of the Dry Density-Moisture Content Tests

Location	Depth ft.	Soil Description	Dry Density, pcf	Moisture Content, %
B1	5	Brown, silty Sand	108.5	7.8
B1	10	Brown, gravelly Sand	114.1	3.5
B1	15	Brown, gravelly Sand	132.7	3.0
B1	20	Brown, gravelly Sand	109.6	3.6
B1	25	Brown, gravelly Sand	129.4	4.6
B1	30	Light brown, gravelly Sand	117.5	2.4
B1	35	Tan-brown, gravelly Sand	109.6	5.5
B1	40	Tan-brown, gravelly Sand	123.5	9.0
B1	45	Tan-brown, gravelly Sand	109.9	5.5
B1	50	Brown, sandy Silt	112.1	15.6
B2	5	Brown, silty Sand	105.4	18.0
B2	10	Tan-brown, gravelly Sand	112.4	6.2

Table 2. (Continued) Results of the Dry Density-Moisture Content Tests

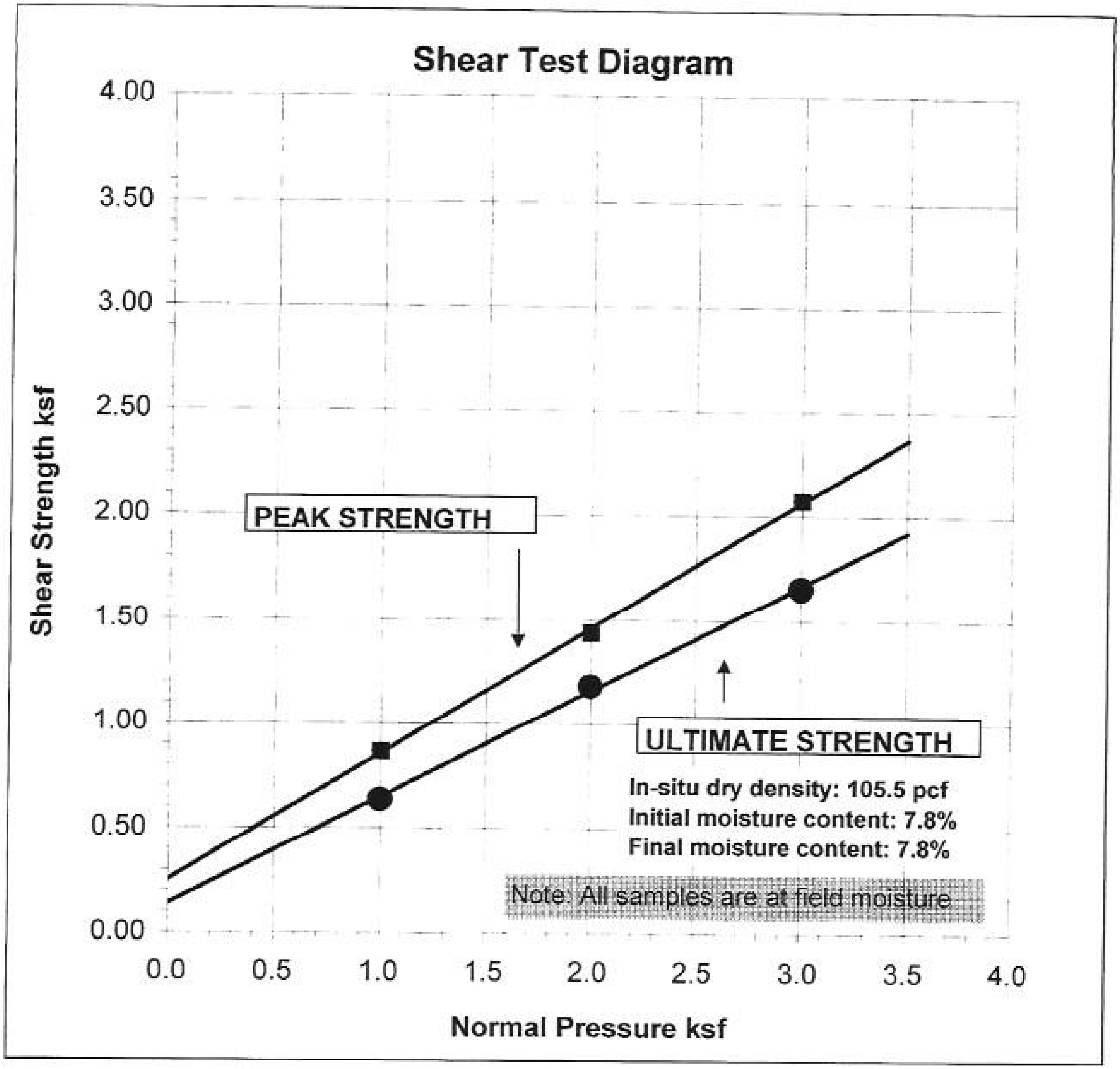
Location	Depth ft.	Soil Description	Dry Density, pcf	Moisture Content, %
B2	15	Light brown, gravelly Sand	114.3	3.2
B2	20	Light brown, gravelly Sand	112.6	1.9
B2	25	Light brown, gravelly Sand	121.4	3.1
B2	30	Light brown, gravelly Sand	119.5	1.9
B3	5	Brown, silty Sand	116.7	5.2
B3	10	Brown, silty Sand	115.3	6.3
B3	15	Brown, gravelly Sand	63.5	1.7
B3	20	Brown, gravelly Sand	112.7	11.8
B3	25	Brown, gravelly Sand	121.8	1.2
B3	30	Brown, gravelly Sand	112.9	2.7
B3	35	Brown, gravelly Sand	120.5	2.6
B4	5	Light brown, Sand with some silt	115.9	1.5
B4	10	Tan, gravelly Sand	130.1	4.3
B4	15	Tan, gravelly Sand	124.2	1.2
B4	20	Brown, gravelly silty Sand	104.0	2.3
B4	25	Brown, gravelly silty Sand	118.3	2.5
B4	30	Brown, gravelly silty Sand	118.4	1.6
B4	35	Brown, gravelly silty Sand	124.7	1.3
B5	5	Pale gray-brown, sandy Silt	118.1	2.7
B5	10	Tan, gravelly Sand	119.6	5.6
B5	15	Light brown, gravelly Sand	110.8	2.1
B5	20	Brown, gravelly silty Sand	120.3	2.4
B5	25	Brown, gravelly silty Sand	108.5	18.0
B5	30	Light brown, gravelly Sand	119.0	2.5

Table 2. (Continued) Results of the Dry Density-Moisture Content Tests

Location	Depth ft.	Soil Description	Dry Density, pcf	Moisture Content, %
B6	10	Brown, Sand with silt	117.8	4.7
B6	20	Brown, Sand	115.4	3.4
B6	30	Brown, gravelly Sand	123.9	2.5
B6	40	Brown, gravelly Sand	113.4	12.6
B6	50	Brown, gravelly Sand	109.5	3.7

Table 3. Results of Laboratory Compaction and Expansion Tests

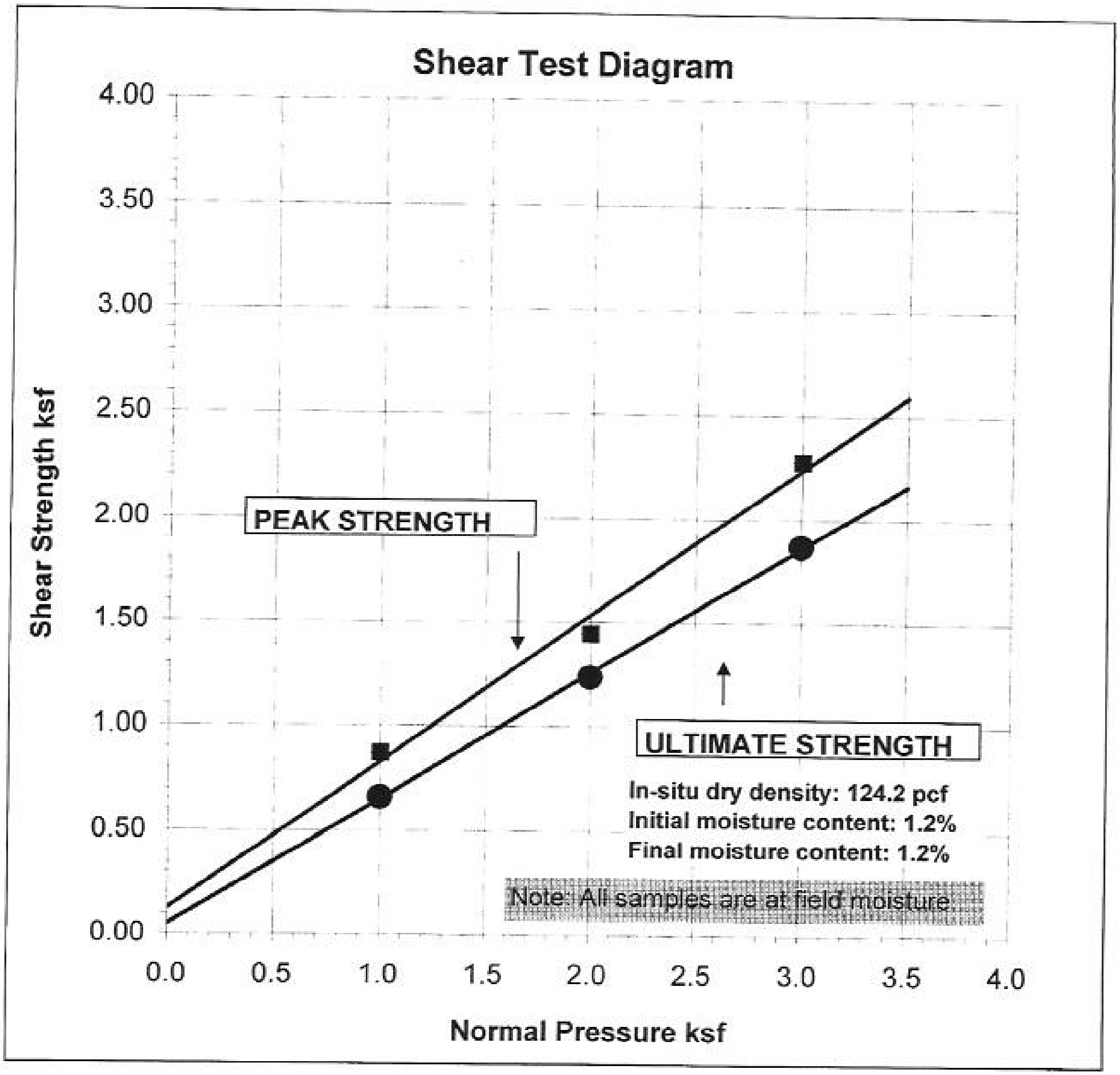
Location	Depth ft.	Soil Description	Maximum Dry Density, pcf	Optimum Moisture, %	Expansion Index
B1	0-5	Brown, silty Sand	120	9.5	1 - Very Low



DATE: 9/23/2013	SAMPLE: B1 - 5'
CLIENT: CMGT (COLORADO)	PROJECT NO. 2470

RYBAK GEOTECHNICAL, INC.

Plate B-1



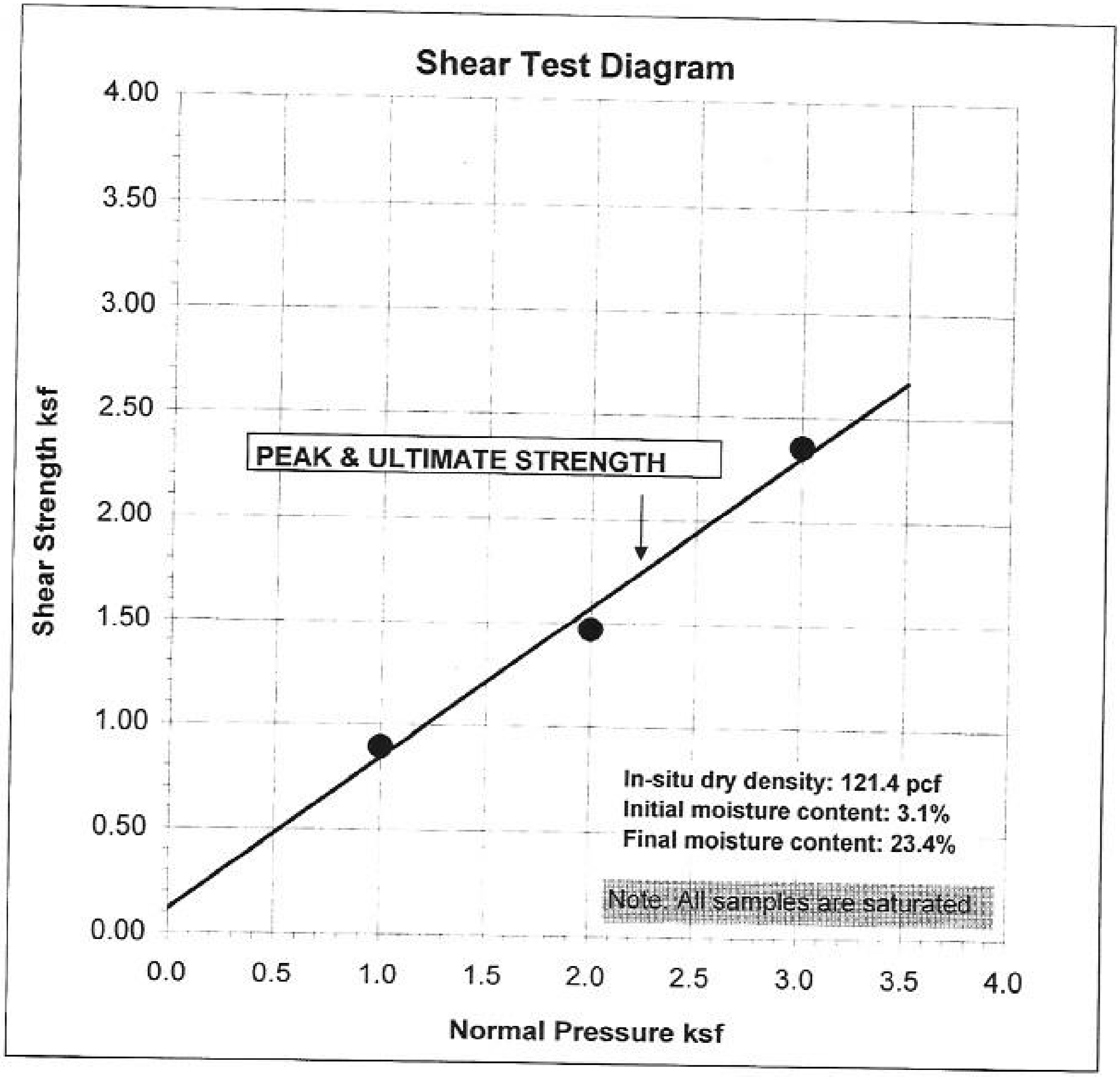
In-situ dry density: 124.2 pcf
Initial moisture content: 1.2%
Final moisture content: 1.2%

Note: All samples are at field moisture

DATE: 9/23/2013	**SAMPLE: B4 - 15'**
CLIENT: CMGT (COLORADO)	**PROJECT NO. 2470**

RYBAK GEOTECHNICAL, INC.

Plate B-2



In-situ dry density: 121.4 pcf
Initial moisture content: 3.1%
Final moisture content: 23.4%

Note: All samples are saturated

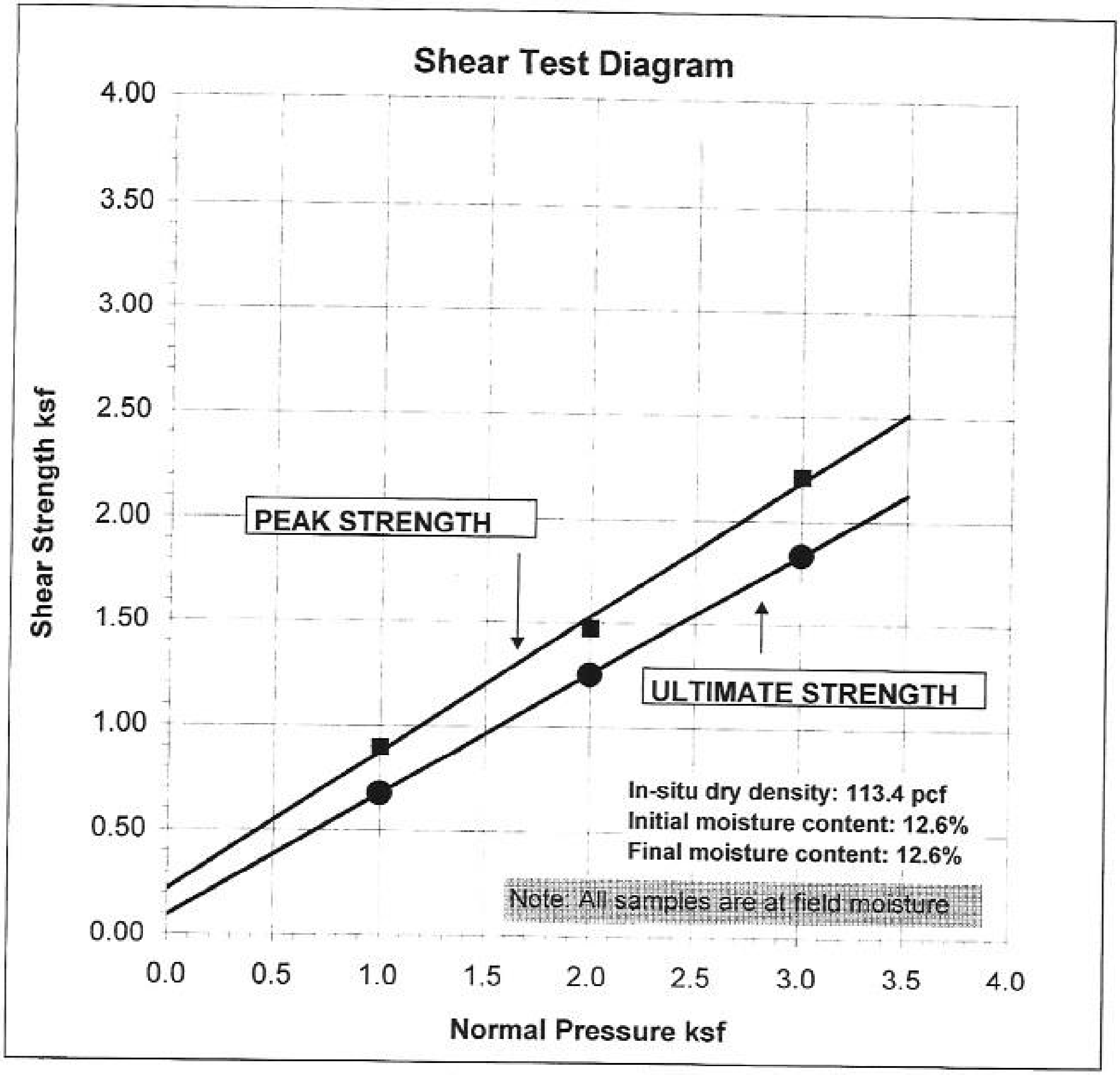
DATE: 9/23/2013

SAMPLE: B2 - 25'

CLIENT: CMGT (COLORADO)

PROJECT NO. 2470

RYBAK GEOTECHNICAL, INC.



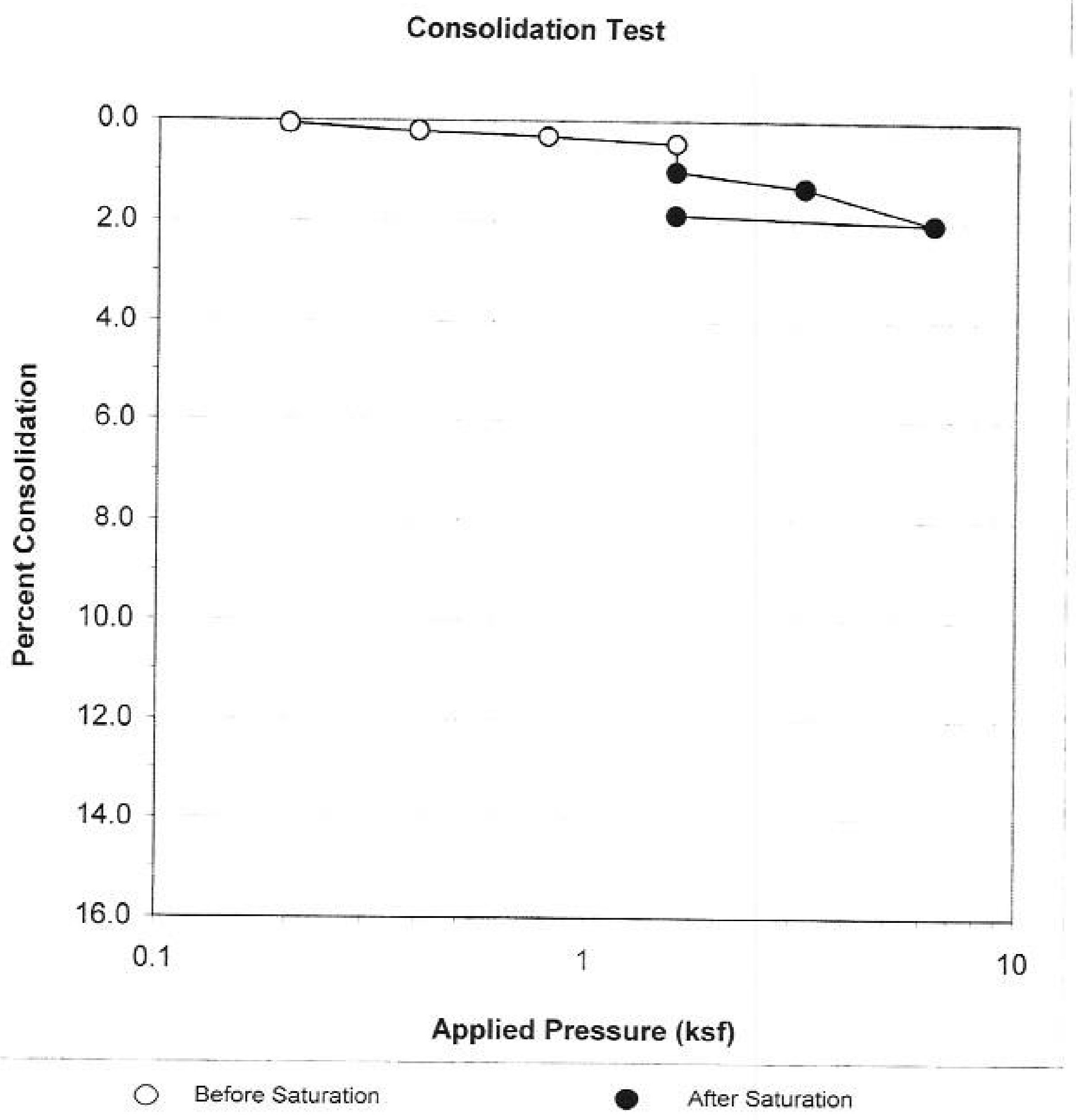
In-situ dry density: 113.4 pcf
Initial moisture content: 12.6%
Final moisture content: 12.6%

Note: All samples are at field moisture

DATE: 9/23/2013	**SAMPLE: B6 - 40'**
CLIENT: CMGT (COLORADO)	**PROJECT NO. 2470**

RYBAK GEOTECHNICAL, INC.

Plate B-4



DATE: 09/20/2013

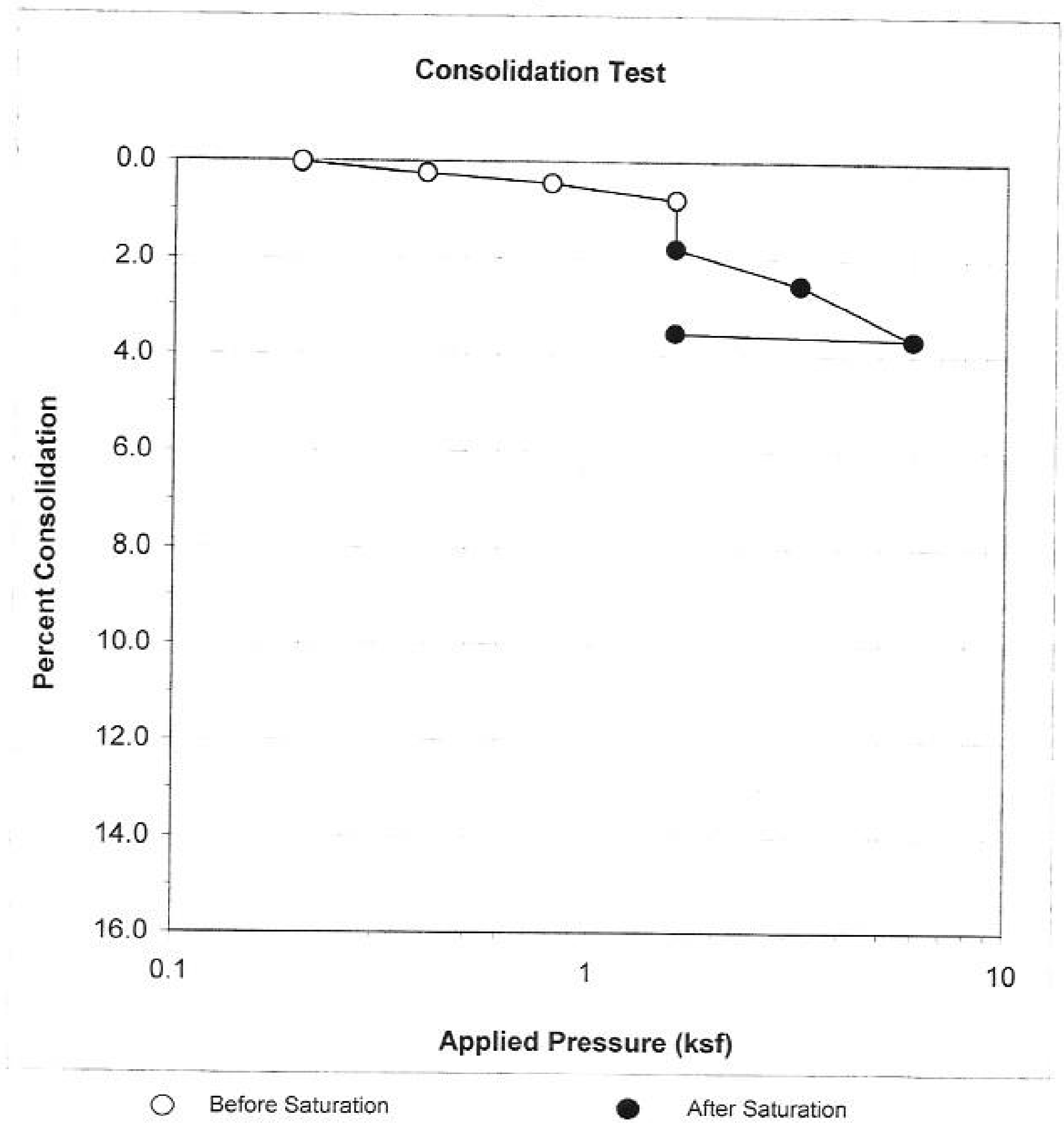
SAMPLE: B3 - 15.0'

CLIENT: CMGT (COLORADO)

PROJECT NO. 2470

RYBAK GEOTECHNICAL, INC.

Plate C-1



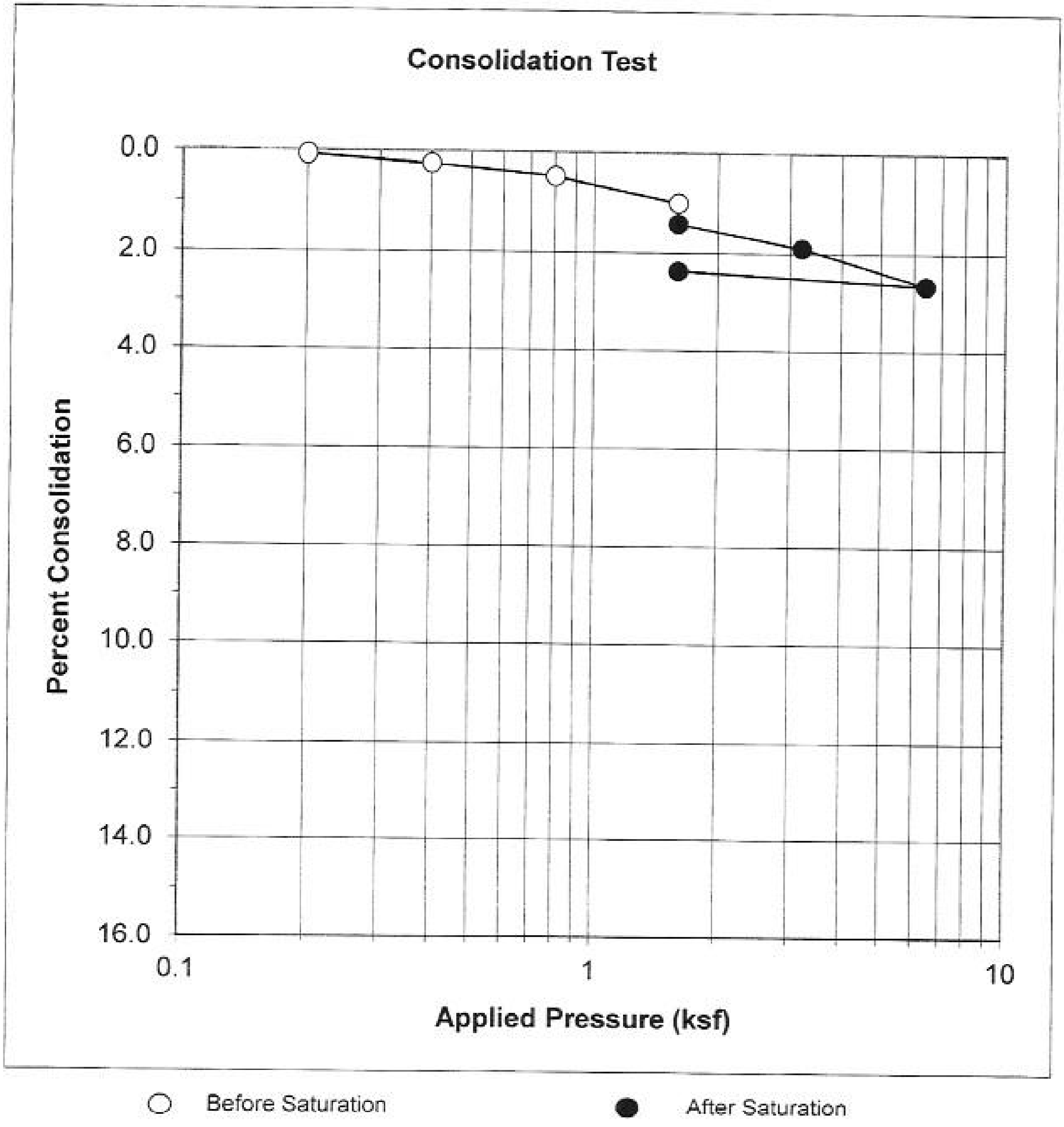
DATE: 09/20/2013

SAMPLE: B5 - 25.0'

CLIENT: CMGT (COLORADO)

PROJECT NO. 2470

RYBAK GEOTECHNICAL, INC.



DATE: 09/20/2013

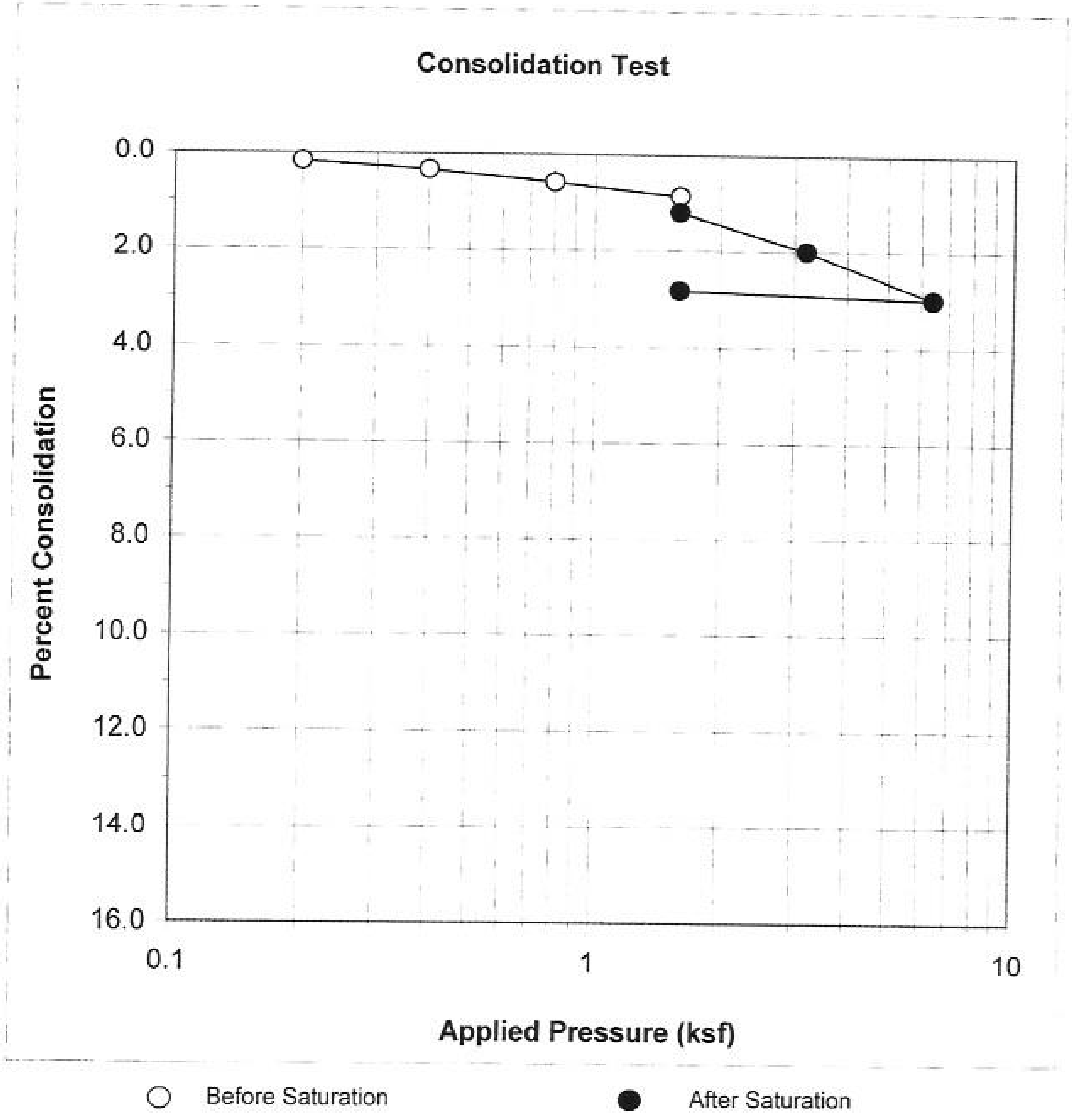
SAMPLE: B2 - 30.0'

CLIENT: CMGT (COLORADO)

PROJECT NO. 2470

RYBAK GEOTECHNICAL, INC.

Plate C-3



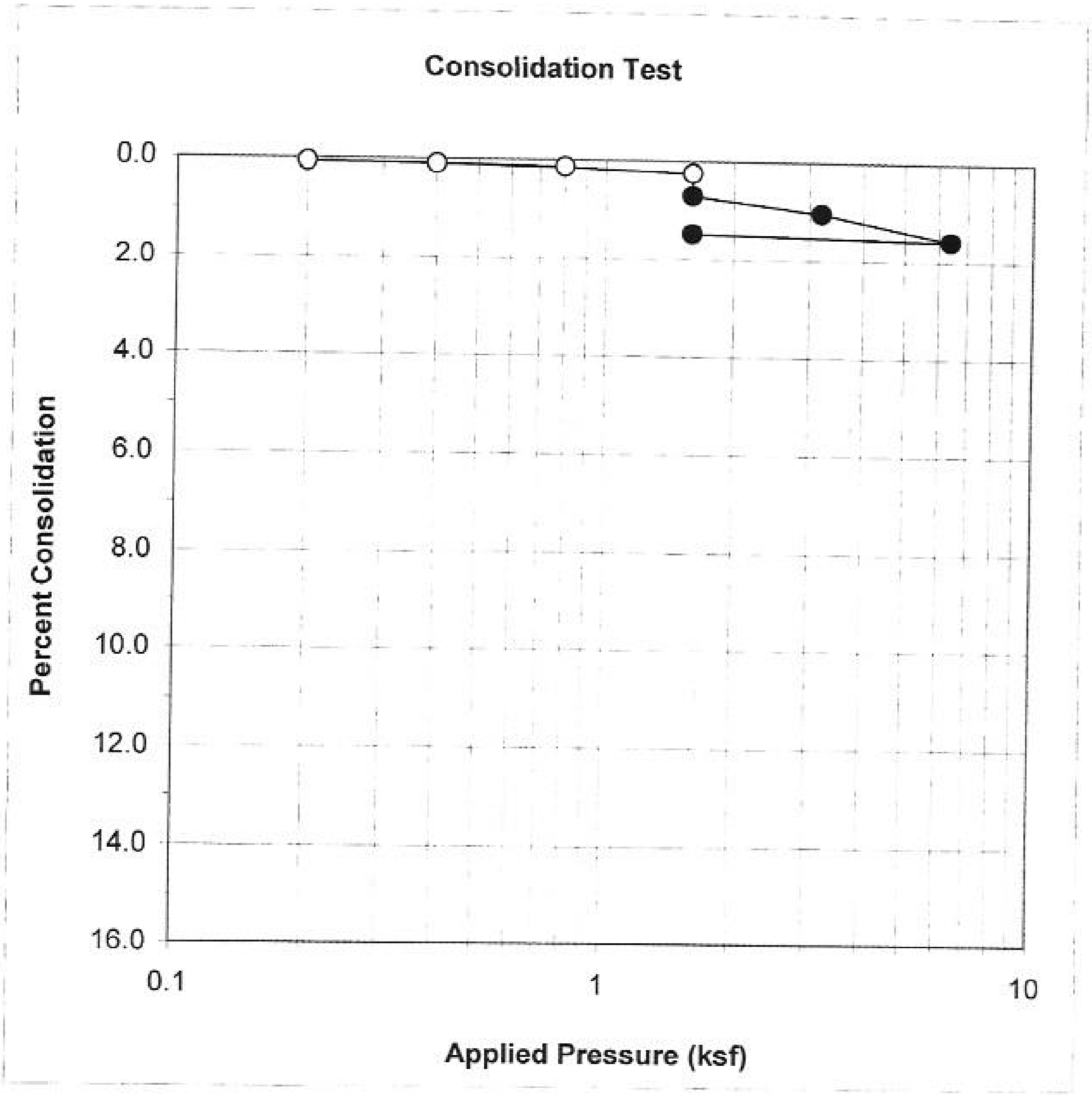
DATE: 09/20/2013

SAMPLE: B6 - 30.0'

CLIENT: CMGT (COLORADO)

PROJECT NO. 2470

RYBAK GEOTECHNICAL, INC.



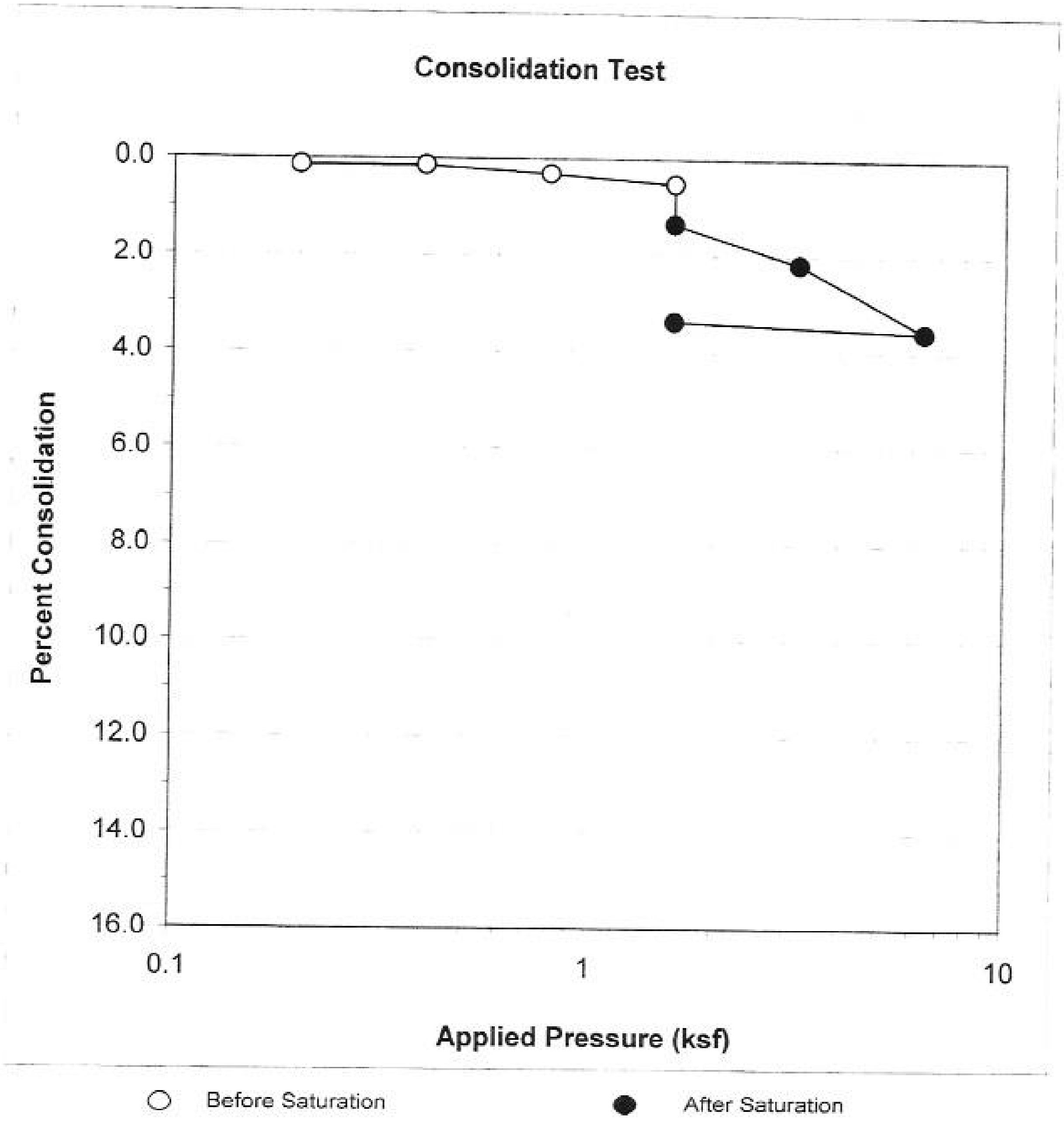
○ Before Saturation

● After Saturation

DATE: 9/20/2013	**SAMPLE: B1 - 35.0'**
CLIENT: CMGT (COLORADO)	**PROJECT NO. 2470**

RYBAK GEOTECHNICAL, INC.

Plate C-5



DATE: 09/20/2013

SAMPLE: B6 - 40.0'

CLIENT: CMGT (COLORADO)

PROJECT NO. 2470

RYBAK GEOTECHNICAL, INC.

Plate C-6

AP Engineering & Testing, Inc.

CORROSION TEST RESULTS

Client Name: Rybak Geotechnical, Inc.
Project Name: CMGT
Project No.: 2470

AP Job No.: 13-0967
Date 09/27/13

Boring No.	Sample No.	Depth (feet)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
B-1	-	5	SM	15860	8.1	32	65
B-5	-	25	SM	10935	7.5	40	63

NOTES:
Resistivity Test and pH: California Test Method 643
Sulfate Content : California Test Method 417
Chloride Content : California Test Method 422
ND = Not Detectable
NA = Not Sufficient Sample
NR = Not Requested

2607 Pomona Boulevard, Pomona, CA 91768
Tel. (909) 869-6316 Fax. (909)869-6318

PLATE D