

iv. Supporting Explanation

Water supply usage in accordance with the Plan has been accounted for in PWP's 2010 UWMP and the City has sufficient water supply to meet the anticipated demand of the Plan area. The 2010 UWMP is based on SCAG projections, which are consistent with the level of development proposed under the Plan. (EIR, p. 5.12-11.) The need for new infrastructure is a potentially significant impact. PWP would continue to monitor the existing water infrastructure and facilities in the area as individual projects are constructed in accordance with the Plan. Larger development projects may require a civil engineering study to determine the impacts on existing infrastructure and facilities. However, with the implementation of Mitigation Measure 12-1, this impact is mitigated to below a level of significance. (EIR, p. 5.12-13.) As development in accordance with the Plan occurs, site specific projects would be required to comply with the California Fire Code. This will ensure that adequate fire flow requirements are met based on the size and type of individual buildings. (EIR, p. 5.12-12.)

With regard to wastewater treatment capacity impacts, the wastewater plants that would be used by the Plan have 6.9 mgd and 16.1 mgd remaining capacity for water treatment. The Plan's contribution, 0.2 mgd, would not impact the treatment capacity of the two plants. The City has indicated that it has sufficient wastewater and treatment capacity to serve buildout of the Plan. Further, the Plan is within SCAG regional growth forecasts which are used to determine the design capacities of LACSD's wastewater treatment facilities. (EIR, p. 5.12-16.) Future site specific development projects may

require new infrastructure to meet the sewer system demand, but with the imposition of Mitigation Measure 12-2, this impact is mitigated to below a level of significance. (EIR, p. 5.12-17.)

When the projected increase in solid waste generation from Plan buildout is combined with the City's rate of 164,418 tons per year from 2008, the total would be 165,456 tons per year, an increase of 0.63 percent. The landfills used by the City would have sufficient remaining capacity to accommodate this annual increase. Impacts would be less than significant. (EIR, p. 5.12-20.) Construction under the Plan would generate waste from building demolition and rehabilitation and the use of new materials to build new buildings. Projects that meet certain criteria must comply with the provisions of the Construction and Demolition Waste Management Ordinance. Accordingly, these impacts are less than significant. (EIR, p. 5.12-21.)

Cumulative Impacts. Cumulative water supply and infrastructure impacts are less than significant. The long range UWMP includes the provision of adequate supplies to accommodate buildout of the General Plan based on SCAG projections for the City. Adequate water supplies are available to meet the project as well as related projects that have been approved and are identified for future development. Further, the Plan does not present significant impacts to the existing infrastructure. However, as future development projects are proposed, they would be required to complete technical and civil engineering analyses to determine the need for new infrastructure. As

the City approves projects on an individual basis, they would be required to disclose any impacts they may have on the existing infrastructure and improvements that should be made. The Plan's impacts would not cause cumulative impacts related to water supply infrastructure when combined with the impacts of other projects in the City. (EIR, p. 5.12-13.)

Cumulative impacts to wastewater systems would occur when additional growth in the area would affect the same facilities and infrastructure as the proposed project in a way that would cause substantial cumulative environmental impact. PWP has sufficient and planned capacity to treat wastewater consistent with the growth forecast by SCAG. SCAG's forecasts take into account general plan data. Growth assumed in the City's General Plan is consistent with SCAG's growth projections. Cumulative impacts to area sewer systems would be less than significant. (EIR, p. 5.12-17.)

The implementation of the Plan, in combination with general plan buildout and related projects cause cumulative impacts to solid waste services. However, the City of Pasadena is required to, and currently does, comply with the state-mandated integrated waste management plan which is required to provide sufficient disposal capacity for a project period of 15 years. The Plan in combination with surrounding projects would not cause cumulative impacts related to solid waste because the City has provided for sufficient capacity over the life of the Plan. (EIR, p. 5.12-21.)

V. RESOLUTION REGARDING ENVIRONMENTAL IMPACTS UNABLE TO BE MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE

The City Council finds that, although mitigation measures have been identified in the Final EIR that reduce the following potentially significant environmental impacts, the impacts cannot be mitigated to below a level of significance.

a. Air Quality

i. Potential Significant Impacts

- 5.2-1 The Lincoln Avenue Specific Plan is a regionally significant project whose operational phase emissions would substantially contribute to air pollutant emissions in the South Coast Air Basin and potentially conflict with the assumptions in the Air Quality Management Plan. (EIR, p. 5.2-13.)
- 5.2-2 Short-term construction emissions generated by development within the Lincoln Avenue Specific Plan would result in emissions that exceed South Coast Air Quality Management District's regional significance thresholds and cumulatively contribute to the ozone, particulate matter, and nitrogen dioxide nonattainment designations of the South Coast Air Basin. (EIR, p. 5.2-14.)
- 5.2-3 Long-term operation of land uses associated with redevelopment of the Lincoln Avenue Specific Plan would generate criteria air pollutant emissions that exceed South Coast Air Quality Management District's regional significance thresholds and would significantly contribute to the ozone, particulate matter, and nitrogen dioxide nonattainment designations of the South Coast Air Basin. (EIR, p. 5.2-15.)
- 5.2-4 Construction activities associated with the Lincoln Avenue Specific Plan could expose sensitive receptors to substantial pollutant concentrations. (EIR, p. 5.2-16.)
- 5.2-5 Operation of the proposed project would not expose off-site sensitive receptors to substantial concentrations of air pollutants. (EIR, p. 5.2-16.)
- 5.2-6 The Lincoln Avenue Specific Plan may result in placement of sensitive land uses proximate to major sources of air pollution. (EIR, p. 5.2-17.)

ii. Proposed Mitigation

- 2-1 Applicants for new development projects within the Lincoln Avenue Specific Plan shall require the construction contractor to use equipment that meets the United

States Environmental Protection Agency (EPA)-Certified emissions standards according to the following schedule.

- From the end of 2011 to December 31, 2014, all project-related off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road emissions standards. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine, as defined by CARB regulations.
- After January 1, 2015, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by CARB regulations.

Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for EPA Tier 3 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the project site for verification by the Building Official or their designee. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall properly service and maintain construction equipment in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449. If construction activities involve haul of demolition materials and/or soil, the construction contractor shall use haul trucks and/or require subcontractors to use haul trucks that are 2010 or newer for demolition and construction (C&D) debris removal offsite and soil haul, unless evidence is provided by the contractor/subcontractor that such trucks are not readily available at the time of issuance of a demolition and/or grading permit.

2-2 Applicants for new development projects within the Lincoln Avenue Specific Plan shall require the construction contractor to prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District Rule 403 to further reduce PM10 and PM2.5 emissions. The Building Official or their designee shall verify compliance that these measures have been implemented during normal construction site inspections.

- Following all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering.

- During all construction activities, the construction contractor shall sweep streets with Rule 1186–compliant, PM10-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling.
 - During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other cover that achieves the same amount of protection.
 - During all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day.
 - During all construction activities, the construction contractor shall limit onsite vehicle speeds on unpaved roads to no more than 15 miles per hour.
- 2-3** Applicants for new development projects within the Lincoln Avenue Specific Plan shall require the construction contractor to use coatings and solvents with a volatile organic compound (VOC) content lower than required under Rule 1113 (i.e., super compliant paints). All architectural coatings shall be applied either by (1) using a high-volume, low-pressure spray method operated at an air pressure between 0.1 and 10 pounds per square inch gauge to achieve a 65 percent application efficiency; or (2) manual application using a paintbrush, hand-roller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent applicant efficiency. The construction contractor shall also use precoated/natural colored building materials, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans and verified by the Building Official or their designee during construction.
- 2-4** Residential developments that include garage parking shall be electrically wired to accommodate electric vehicle charging. The location of the electrical outlets shall be specified on building plans and proper installation shall be verified by the Building Division prior to issuance of a Certificate of Occupancy.
- 2-5** Applicant-provided appliances shall be Energy Star appliances (dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star appliances shall be verified by the Building Division during plan check.
- 2-6** The Project Applicant for residential or residential mixed-use projects within: 1) 1,000 feet from the truck bays of an existing distribution centers that accommodate more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units, or where transport refrigeration unit operations exceed 300 hours per week; 2) 1,000 feet of an industrial facility which emits toxic air contaminants; or 3) 500 feet of Interstate 210 (I-210) shall submit a

health risk assessment (HRA) prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD). The HRA shall be submitted to the Zoning Administrator prior to approval of any future discretionary residential or residential mixed-use project. If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand ($1.0E-05$), or the appropriate noncancer hazard index exceeds 1.0, or if the PM₁₀ or PM_{2.5} ambient air quality standard exceeds $2.5 \mu\text{g}/\text{m}^3$, the HRA shall identify the level of high-efficiency Minimum Efficiency Reporting Value (MERV) filter required to reduce indoor air concentrations of pollutants to achieve the cancer, and/or noncancer, and/or ambient air quality threshold. Heating, ventilation, and air conditioning systems for units that are installed with MERV filters shall maintain positive pressure within the building's filtered ventilation system to reduce infiltration of unfiltered outdoor air. The Applicant shall be required to install high efficiency MERV filters in the intake of residential ventilation systems, consistent with the recommendations of the HRA. Heating, air conditioning and ventilation (HVAC) systems shall be installed with a fan unit power designed to force air through the MERV filter. To ensure long-term maintenance and replacement of the MERV filters in the individual units, the following shall occur:

- a) Developer, sale, and/or rental representative shall provide notification to all affected tenants/residents of the potential health risk for affected units.
- b) For rental units, the owner/property manager shall maintain and replace MERV filters in accordance with the manufacture's recommendations. The property owner shall inform renters of increased risk of exposure to diesel particulates when windows are open.
- c) For residential owned units, the Homeowner's Association (HOA) shall incorporate requirements for long-term maintenance in the Covenant Conditions and Restrictions and inform homeowners of their responsibility to maintain the MERV filter in accordance with the manufacturer's recommendations. The HOA shall inform homeowners of increased risk of exposure to diesel particulates when windows are open.
- d) Outdoor active-use public recreational areas associated with development projects shall be located more than 500 feet from the nearest lane of traffic on the Interstate 210 if cancer, noncancer, and PM concentrations exceed the applicable thresholds identified above.
- e) For projects within 500 feet of the freeway, air intakes on residential buildings shall be placed as far from I-210 as possible as identified on a case-by-case basis in consultation with the Building Official.
- f) For projects within 500 feet of the freeway, the residential buildings shall be designed to limit the use of operable windows and/or balconies on portions of

the site adjacent to and facing I-210 to the extent allowed by the Building Code and Fire Code.

iii. Findings Pursuant to CEQA Guidelines Section 15091

Changes or alterations have been required in, or incorporated into, the Plan which avoid or substantially lessen the significant environmental effect as identified in the Final EIR. However, these impacts cannot be mitigated to below a level of significance.

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible Plan alternatives identified in the Final EIR.

iv. Supporting Explanation (Including Cumulative Impacts)

With regard to regional impact analyses under impacts 5.2-1 through 5.2-3, CEQA requires that general plans and specific plans be evaluated for consistency with the Air Quality Management Plan (“AQMP”) prepared by the Southern California Association of Governments (“SCAG”). Projects that are consistent with the local general plan are considered consistent with the AQMP. (EIR, p. 5.2-13.) The Plan is considered regionally significant because it would result in the development of over 250,000 square feet of commercial office space. Changes in the population, housing, or employment growth projections associated with the Plan have the potential to substantially affect SCAG’s demographic projections and the assumptions in SCAQMD’s AQMP. While the Plan is consistent with regional growth forecasts for the

City, the Plan would require a General Plan amendment to accommodate the change in land uses and increase in development intensity. Because regional transportation modeling is based on the underlying General Plan land use designation, the Plan could potentially change the assumptions of the AQMP. (Ibid.) Since the Plan has the potential to exceed the assumptions of the AQMP, criteria air pollutants generated during operation of the Plan would exceed SCAQMD's regional operational threshold, thereby potentially exceeding the assumptions in the AQMP, and would not be considered consistent with the AQMP. (Ibid.)

Short term construction emissions generated by development within the Plan, and long term operation of land uses associated with development under the Plan would result in increased emissions. An estimate of maximum daily construction emissions from transition of the Plan from industrial to office, commercial, and retail land uses are provided in Table 5.2-7, and shows that adherence to SCAQMD Rule 403 would minimize particulate matter emissions generated by fugitive dust generation, and total particulate matter (PM10 and PM2.5) emissions would be under SCAQMD's regional significance thresholds even if multiple phases overlap. However, NOx and VOC emissions would exceed the SCAQMD regional thresholds. (Id. at p. 5.2-14.) Likewise, as shown in Table 5.2-8, operation of the Plan would generate air pollutant emissions that exceed SCAQMD's regional significance thresholds for VOC, NOx, CO, and PM10 at buildout. Emissions of NOx that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O3, particulate matter (PM10 and

PM2.5), and NO2 nonattainment designations of the SoCAB, and emissions of PM10 would contribute to the PM10 nonattainment designation. Consequently, the Plan would result in a significant impact because it would significantly contribute to the nonattainment designations of the SoCAB. (Id. at p. 5.2-15.)

Even after mitigation, these three impacts remain significant. Mitigation measures 2-1, 2-2 and 2-3 would reduce the Plan's regional construction-related and operational phase criteria air pollutant emissions to the extent feasible. However, the Plan would continue to be potentially inconsistent with the assumptions in the AQMP. Compliance with mitigation measures 2-1 through 2-3 would reduce the Plan's regional construction-related and operational phase criteria air pollutant emissions to the extent feasible, but the Plan would continue to be potentially inconsistent with the assumptions in the AQMP. Accordingly, impacts 5.2-1 and 5.2-2 would remain significant and unavoidable. Compliance with the City of Pasadena Zoning Code (Chapter 17.46.320), the City's Green Building Standards Code (Section 14.04), and Mitigation Measures 2-4 and 2-5 would encourage zero- or near-zero emission vehicles or alternative modes of transportation, and reduce natural resource and energy uses, thereby reducing operational phase criteria air pollutants to the extent practicable. However, criteria air pollutant emissions would continue to exceed the SCAQMD regional significance thresholds and Impact 5.2-3 would also remain significant and unavoidable.

The Plan could expose sensitive receptors to elevated pollutant concentrations during construction activities, as described in impact 5.2-4. Concentrations of criteria air

pollutants generated by a project depend on the emissions generated on-site and the distance to the nearest sensitive receptor. Therefore, a localized significance threshold (“LST”) analysis can only be conducted at a project-level, and is not applicable for this program-level environmental analysis. (EIR, p. 5.2-16.) Mitigation Measures 2-1 and 2-2 would reduce the Plan’s regional construction emissions and therefore also reduce its localized construction-related criteria air pollutant emissions to the extent feasible. However, because existing sensitive receptors may be close to construction activities, construction emissions generated by individual projects built under the Plan have the potential to exceed SCAMQD’s LSTs, and impact 5.2-4 would remain significant and unavoidable. (Id. at p. 5.2-24.)

Under impact 5.2-5, operation of the Plan would not generate substantial quantities of onsite, stationary sources of emissions. Similarly, the Plan would not produce the volume of traffic required to generate a CO hotspot. Localized air quality impacts related to mobile-source emissions would therefore be less than significant. (EIR, pp. 5.2-16 and 5.2-17.)

The Plan introduces the LASP-CL zone, allowing mixed use (including residential) on the west side of Lincoln Avenue between the I-210 and Pepper Street. These new residential land uses could be exposed to substantial concentrations of TACs from I-210 or stationary sources within or proximate to the Plan area. Consequently, air quality compatibility impacts for new sensitive land uses are potentially significant, as discussed in impact 5.2-6. (EIR, p. 5.2-17.) Adherence to

Mitigation Measure 2-6 would ensure that new residential land uses proximate to these major sources of toxic air contaminants reduce risk by installing high-efficiency MERV filters to reduce indoor concentrations particulates (including diesel particulate matter, which comprises the majority of risk) below SCAQMD's threshold. With implementation of Mitigation Measure 2-6, impact 5.2-6 would be less than significant. (EIR, p. 5.2-25.)

b. Greenhouse Gases

i. Potential Significant Impacts

- 5.4-1: New commercial, office, and residential land uses would result in a substantial increase in GHG emissions in the Lincoln Avenue Specific Plan area. (EIR, p. 5.4-11.)
- 5.4-2: The Plan would not conflict with plans adopted for the purpose of reducing GHG emissions. (EIR, p. 5.4-12.)

ii. Proposed Mitigation

- 4-1 Applicants for non-residential projects within the Lincoln Avenue Specific Plan or applicable designee (e.g., building manager), that employ 20 or more people—which is equivalent to 16,000 square feet of retail space or 10,000 square feet of office space—shall implement an employee commute trip reduction (CTR) program. The CTR program shall identify alternative modes of transportation to the project, including transit schedules, bike and pedestrian routes, and carpool/vanpool availability. Information regarding these programs shall be readily available to employees and clients. The project applicant or designee shall consider the following incentives for commuters as part of the CTR program:
- Ride-matching assistance (e.g., subsidized public transit passes)
 - Vanpool assistance or employer-provided vanpool/shuttle
 - Car-sharing program (e.g., Zipcar) Bicycle end-trip facilities, including bike parking and lockers.
 - Bicycle end-trip facilities, including bike parking and lockers.

iii. Findings Pursuant to CEQA Guidelines Section 15091

Changes or alterations have been required in, or incorporated into, the Plan which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

iv. Supporting Explanation (Including Cumulative Impacts)

A project does not generate enough GHG emissions on its own to influence global climate change. Therefore, the GHG analysis in the EIR measures a project's contribution to the cumulative environmental impact. The development contemplated under the Plan would contribute to global climate change through direct emissions of GHG from onsite area sources and vehicle trips generated by development under the Plan, and indirectly through offsite energy production required for onsite activities, water use, and waste disposal. Annual GHG emissions calculated for construction and operation of the Plan would exceed SCAQMD's draft bright-line screening threshold. (EIR, pp. 5.4-11 and 12, Table 5.4-5.) Therefore, a detailed emissions analysis of the Plan's efficiency compared to the draft SCAQMD GHG per capita threshold was done.

At buildout, the Plan would generate approximately 31,526 MTons of GHG per year, or 12.8 MTons per service population (employees and residents). The total increase in GHG emissions in the Plan area, 17,256 MTons, would be substantial and would exceed both the proposed bright-line threshold of 3,000 MTons for all land use types and the proposed 4.8 MTons per service population efficiency metric. The greatest increase in GHG emissions is a result of the increase in office and commercial

land uses within the Plan boundaries. The increase in per capita GHG emissions within the Plan area, despite the increase in land use intensity, is a result of the number of vehicle trips generated by customers who neither live nor work in the Plan area.

Therefore, while the Plan would result in an increase in diversity of land use types within the specific plan area, GHG emissions are considered to be substantial enough to result in a significant cumulative impact relative to GHG emissions. (EIR, p. 5.4-12.)

While the Plan would not conflict with plans adopted for the purpose of reducing GHG emissions, emissions generated at buildout of the Plan would exceed SCAQMD's draft per capita significance threshold and are considered to cumulatively contribute to GHG emissions. Mitigation Measures 2-4 through 2-6, and 4-1, would assist in reducing Plan-related GHG emissions, to the extent feasible. While all feasible mitigation measures have been incorporated, the total increase in GHG emissions onsite from the Plan would still exceed the proposed threshold and remain significant and unavoidable.

Nonetheless, the Plan would not conflict with plans adopted for the purpose of reducing GHG emissions. The City has adopted a Green Building Standards Code (PMC Chapter 14.04) to reduce building energy use and associated GHG emissions. Nonresidential development over 25,000 square feet would be subject to mandatory Tier 1 CALGreen standards, and nonresidential development over 50,000 square feet would be subject to mandatory Tier 2 CALGreen standards of Pasadena's Green Building Standards Code. Compliance with this Code would result in a 15 to 30 percent

increase in building (Title 24) energy efficiency. The City also requires compliance with prerequisite and elective measures to achieve an equivalent 40 to 50 Leadership in Energy and Environmental Design (LEED) points for nonresidential projects over 25,000 square feet. No other GHG reduction plans are applicable for the Plan. Statewide GHG emissions reduction measures that are being implemented over the next eight years would assist the City in reducing the project's GHG emissions. The Plan would be consistent with GHG reduction policies and programs to achieve the GHG reduction targets of AB 32. (EIR, p. 5.4-13.) The City of Pasadena has also developed an Action Plan (2006) to create a more sustainable City capable of meeting growing demand and reducing impacts to natural resources. The City's Green City Action Plan goals are applicable on a City-level and implementation of the Plan would not hinder the City's ability to implement its goals. (Id. at p. 5.4-14.) Finally, SCAG's RTP/SCS identifies land use strategies that focus new housing and job growth in areas served by high quality transit areas and other opportunities areas. The Plan would increase land use intensity along the Lincoln Avenue corridor, in a high quality transit area that is adequately served by existing public transit (i.e., near Metrolink and local bus lines). Intensifying residential, office, and commercial land uses along this corridor would be consistent with the SCS. A key component in the Plan is a "road diet" that would reduce the number of travel lanes (one northbound and southbound travel lane) south of Washington Avenue. The road diet is a traffic-calming measure that would improve safety and increase the right-of-way available for alternative transportation users (e.g.,

pedestrians, bicycles, and transit users). Consequently, the project would not conflict with the 2012 RTP/SCS. (Id. at pp. 5.4-14 and 15.) Upon implementation of regulatory requirements and standard conditions of approval, the Plan will have a less than significant effect on plans adopted for the purpose of reducing GHG emissions. (EIR, p. 5.4-16.)

c. Noise

i. Potential Significant Impacts

- 5.8-1: Implementation of the Specific Plan would not cause a substantial increase in noise related to additional vehicular traffic. (EIR, p. 5.8-12.)
- 5.8-2 Noise levels at proposed residential areas would be above the 45 dBA Ldn interior noise standards. (EIR, p. 5.8-19.)
- 5.8-3 Noise from the operation of commercial/retail and office uses could cause the noise level at the property line of any adjacent property to exceed the ambient noise level by more than 5 DB. (EIR, p. 5.8-19.)
- 5.8-4: Construction activities would generate high levels of groundborne vibration. (EIR, p. 5.8-20.)
- 5.8-5: Construction activities would result in temporary noise increases in the vicinity of the proposed project. (EIR, p. 5.8-22.)

ii. Proposed Mitigation

- 8-1** Prior to issuance of a building permit, applicants for new residential development in the Lincoln Avenue Specific Plan shall submit an acoustic report prepared to the satisfaction of the Building Official or their designee to ensure that all habitable rooms would meet the 45 dBA Ldn interior noise standard. These noise studies would need to be submitted after the precise grading and architectural plans are prepared, but prior to issuance of building permits. The study reports shall demonstrate that interior noise levels in habitable rooms shall not exceed 45 dBA Ldn. The required reduction can be accomplished with enhanced construction design or materials such as upgraded dual-glazed windows and/or upgraded exterior wall assemblies. These features shall be shown on all building plans and incorporated into construction of the project. City inspectors shall verify compliance of the building with the acoustic report's recommendations prior to issuance of a Certificate of Occupancy.

- 8-2** Prior to issuance of a building permit, applicants for new commercial, office, or retail developments in the Lincoln Avenue Specific Plan shall submit an acoustic report prepared to the satisfaction of the Zoning Administrator and Building Official or their designee to ensure that the operation of stationary noise sources (i.e., HVAC units, truck deliveries) would not cause a noise increase over 5 dBA over the ambient noise levels to any adjacent property. These noise studies would need to be submitted after the precise grading and architectural plans are prepared, but prior to issuance of building permits. This requirement can be accomplished with selection of quieter equipment, judicious site layouts and equipment positioning, and/or equipment enclosures, sound screening, or parapet walls. These features shall be shown on all building plans and incorporated into the construction of the project. City inspectors shall verify compliance of the building with the acoustic report's recommendations prior to issuance of a Certificate of Occupancy.
- 8-3** Prior to issuance of a building permit, applicants for projects within the specific plan that involve high-vibration construction activities, such as pile driving or vibratory rolling/compacting, shall be evaluated for potential vibration impacts to nearby sensitive receptors. The project developer shall submit a vibration report prepared to the satisfaction of the City of Pasadena Building Official or their designee to determine if the use of pile driving and/or vibratory rolling/compacting equipment would exceed the Federal Transit Administration's (FTA's) vibration-annoyance criteria of 78 VdB during the daytime or FTA's vibration-induced architectural damage PPV criteria of 0.2 inches/second for wood-framed structures or 0.5 inches/second for reinforced masonry buildings. The construction contractor shall require the use of lower-vibration-producing equipment and techniques. Examples of lower vibration equipment and techniques would include avoiding the use of vibratory rollers near sensitive areas and/or the use of drilled piles, sonic pile driving, or vibratory pile driving (as opposed to impact pile driving).
- 8-4** For projects to be constructed adjacent to any historic structure the project developer shall submit a vibration report prepared to the satisfaction of the City of Pasadena Building Official or their designee to determine if the use of heavy construction equipment such as bulldozer, backhoes, excavators, hoe rams, jackhammers, etc. would exceed the FTA's vibration-induced architectural damage PPV criteria of 0.2 inches/second for historical structures. The construction contractor shall require the use of lower-vibration-producing equipment and techniques. Mitigation measures could include a pre-construction

survey, the use of smaller equipment and techniques (i.e., jackhammers or concrete saws as opposed to hoe rams), and vibration monitoring.

- 8-5** Prior to issuance of grading permits, the project applicant shall ensure the following notes are included on the grading plan cover sheet, and the construction contractor shall comply with these measures during the duration of all construction activities.
- Properly maintain and tune all construction equipment to minimize noise.
 - Fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds, no less effective than as originally equipped by the manufacturer, to minimize noise emissions.
 - Locate all stationary noise sources (e.g., generators, compressors, staging areas) as far from noise-sensitive receptors as possible.

Material delivery, soil haul trucks, and equipment servicing shall be restricted to the hours between 7:00 AM and 7:00 PM Mondays through Fridays, and on Saturdays from 8:00 AM to 5:00 PM, and not at all on Sundays.

- 8-6** Prior to the issuance of grading permits, the project applicant shall prepare a construction management plan that shall be approved by the City of Pasadena Public Works and Pasadena Department of Transportation. The construction management plan shall:
- Establish truck haul routes on the appropriate transportation facilities. Truck routes that avoid congested streets and sensitive land uses shall be considered.
 - Provide Traffic Control Plans (for detours and temporary road closures) that meet the minimum City criteria. Traffic control plans shall determine if dedicated turn lanes for movement of construction truck and equipment on- and off-site are available.
 - Minimize offsite road closures during the peak hours.
 - Keep all construction-related traffic onsite at all times.
 - Provide temporary traffic controls, such as a flag person, during all phases of construction to maintain smooth traffic flow.

iii. Findings Pursuant to CEQA Guidelines Section 15091

Changes or alterations have been required in, or incorporated into, the Plan which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

iv. Supporting Explanation

The Plan would have the potential to generate project-related traffic noise impacts to noise sensitive uses along roadways evaluated in the traffic impact analysis prepared for the Plan. A noise impact may occur if (1) there is a noise increase of 5 dB or more from over existing conditions, (2) project-related traffic is greater than 1 dBA, and (3) the Ldn is 65 dBA or greater in the vicinity of noise sensitive land uses. The highest noise level increase would occur at the segment of Lincoln Avenue from Howard Street to Washington Avenue resulting in a noise increase of 3.6 over existing conditions, and a project contribution of 2.8 dBA. These increases would occur for both the 4-lane project and 2-lane (road diet) project configurations, and would not exceed the City's threshold. Additionally, there are no existing noise-sensitive receptors along that segment and land uses along that segment are zoned General Commercial. As a result, traffic-related Plan noise impacts would be less than significant. (EIR, pp. 5.8-12 to 5.8-19.)

Mixed-use opportunities (commercial/residential) would also be introduced along Lincoln Avenue. As shown on Tables 5.8-7 and 5.8-8 in the EIR, areas where redevelopment is planned for would be exposed to exterior noise levels at the edge of the right of way on Lincoln Avenue ranging from 65.7 to 66.2 dBA Ldn. However, according to the Noise Element, noise contour levels for future conditions show that these areas are located within the 70 to 75 dBA Ldn noise contour from the I-210 freeway. The City has adopted guidelines for noise compatibility for land uses to gauge

the compatibility of new land uses relative to existing and future noise levels. According to the noise compatibility guidelines, the potential residential development areas in the Plan would be in noise zones classified as “conditionally acceptable” for residential uses. In this situation, “an analysis of the noise reduction requirements should be made and needed noise insulation features included in the design.” In addition, all habitable rooms shall not exceed the 45 dBA Ldn interior noise standard. As standard construction materials and methods provide an exterior-to-interior noise reduction of approximately 25 dBA for new residential structures, the expected interior noise level at rooms facing Lincoln Avenue would be approximately 50 dBA Ldn (75 dBA Ldn exterior minus 25 dB for insulation reduction). With standard construction, the interior noise levels at habitable homes could exceed the 45 dBA Ldn noise standard. This would be a significant impact. (EIR, p. 5.8-19.) However, with the imposition of Mitigation Measure 8-1, future residential uses must meet the 45 dBA Ldn interior noise standard, thereby reducing noise impacts at new residential developments to less than significant. (EIR, p. 5.8-28.)

Likewise, new commercial/office/retail uses would have the potential to introduce new stationary sources of noise such as HVAC units, and truck deliveries that have the potential to cause the noise level at the property line of any adjacent property to exceed the ambient noise level by more than 5 dB. (EIR, p. 5.8-19.) However, with the imposition of Mitigation Measure 8-2, which requires compliance with the noise regulations included in the City’s Municipal Code, noise impacts associated with

stationary noise sources from the operation of commercial, office, and retail uses will be reduced to less than significant. (EIR, p. 5.8-28.)

With regard to groundborne vibration and vibration annoyance, construction to implement the Plan may expose people to groundborne vibration and noise. The closest vibration-sensitive structures are the John Muir High School, the adjacent residences on either side of Lincoln Avenue, (mostly between Mountain Avenue and Claremont Street) and between Howard Street and Wyoming Street. Eleven properties within the Plan area were identified as potential historic resources, which have lower thresholds for vibration. In addition, the existing homes to the east and west of the boundaries of the Plan area are also considered vibration-sensitive and would have the potential to be affected by construction activities and vibration annoyance during implementation of the Plan. (EIR, pp. 5.8-20 to 5.8-21.) Construction that involves typical heavy construction equipment would result in vibration impacts when operated less than 100 feet from a given receptor. Several residences would be located within 100 feet from parcels that may be redeveloped or within 100 feet from the street right-of-way and would be temporarily affected by the use of heavy construction equipment during the daytime. Most buildings of the John Muir High School are located at least 50 feet away from the specific plan boundaries. As equipment would move around each construction site and vibration levels dissipate rapidly, vibration impacts at a given receptor would be sporadic and short-term; therefore, these impacts would be less than significant. The operation of pile driving equipment, which is a stationary equipment

item, could potentially cause vibration levels that would be above thresholds at receptors up to 350 feet away. This would be a significant impact. (EIR, pp. 5.8-21 to 5.8-22.) However, with the imposition of Mitigation Measures 8-3 and 8-4, vibration impacts are reduced to below a level of significance. (EIR, p. 5.8-28.)

Construction noise will result in temporary noise impacts in the Plan area. Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from transport of workers, material deliveries, and debris and soil haul and (2) stationary-source noise from use of construction equipment. Construction-related truck traffic could cause substantial noise increases at sensitive uses along residential streets and collector roads. Therefore, noise impacts from construction-related trips would be potentially significant. With regard to noise impacts from construction, the specific locations, duration, and equipment required for individual projects are unknown. Therefore, it cannot be specifically determined how noise-sensitive uses in the specific plan area and surroundings would be affected. Construction of individual developments associated with buildout of the Plan would temporally increase the ambient noise environment at nearby existing and future residential areas. At each individual receptor, the temporary increase would likely last for a few months during the ten-year period to develop the specific plan. Adherence to the City's Municipal Code would require that activities be limited to the daytime hours (i.e., the least noise-sensitive portions of the day), between 7:00 AM and 7:00 PM Mondays through Fridays, and on Saturdays from 8:00 AM to 5:00 PM. Even with these time-of-day constraints, construction activities

associated with any individual development may occur in close proximity to noise-sensitive receptors and noise disturbances may occur for prolonged periods of time. Therefore, construction noise impacts are considered potentially significant. (EIR, pp. 5.8-22 to 5.8-24.) Implementation of Mitigation Measures 8-5 and 8-6 would reduce noise impacts during construction to the extent feasible by requiring that activities be limited to the hours set forth in the City of Pasadena Municipal Code and that stationary source equipment be placed as far as feasible from adjacent noise-sensitive land uses. A construction management plan would also be required to reduce impacts to nearby sensitive uses. However, because new development may occur near noise-sensitive land uses and could generate substantial noise levels for an extended period of time, impacts are considered potentially significant. The magnitude of impact would depend on the location and schedule of the new development and construction equipment. Accordingly, the impact from construction activities overall would remain significant and unavoidable. (EIR, p. 5.8-28.)

Cumulative Impacts. Cumulative construction noise impacts have the potential to occur when multiple construction projects in the same general area generate noise within the same time frame and contribute to the increases in the ambient noise environment. Based on noise levels generated by construction activities associated with the Plan site, the duration of construction activities that would occur intermittently within the approximate ten-year buildout period, and the proximity of the sensitive receptors, construction noise from the Plan could substantially elevate ambient

noise levels. This would significantly contribute to the cumulative noise environment. Cumulative construction noise impacts are considered potentially significant.

Cumulative noise impacts due to traffic sources are a combination of noise levels in the area due to the Plan along with all other traffic growth projected during Plan buildout. The incremental cumulative effect from Plan-related traffic noise impacts would not be cumulatively considerable. Likewise, because there are no existing major stationary noise sources in the vicinity of the Plan site, and Plan-related stationary noise would be less than significant, cumulative noise impacts due to stationary noise sources would also be less than significant. Finally, given that the Plan would not result in significant short- or long-term impacts, and that cumulative development in the City is not expected to result in cumulatively significant noise and vibration impacts, the Plan would not contribute to or result in cumulative significant noise and vibration impacts. Therefore, the cumulative impacts on noise and vibration from anticipated projects in the area including the temporary use of the Rose Bowl Stadium by the NFL would be less than significant. (EIR, p. 5.8-25.)

d. Transportation and Traffic

i. Potential Significant Impacts

- 5.11-1: Project-related trip generation would impact level of service for the existing roadway system. (EIR, p. 5.11-21.)
- 5.11-2: Project-related trip generation would impact levels of service for the study area roadway segments. (EIR, p. 5.11-49.)
- 5.11-3: Project-related trip generation in combination with existing and proposed cumulative development would not result in designated road and/or highways

exceeding County congestion management agency service standards. (EIR, p. 5.11-53.)

5.11-4: Adequate parking would not be provided for the proposed project. (EIR, p. 5.11-54.)

5.11-5: Project circulation improvements would not create potentially hazardous conditions due to a design feature (sharp curves, etc.) or incompatible uses. (EIR, p. 5.11-55.)

5.11-6: The proposed project complies with adopted policies, plans, and programs for alternative transportation. (EIR, p. 5.11-55.)

ii. Proposed Mitigation

11-1 Prior to the issuance of a building permit for a site specific development for new construction or redevelopment that meets the requirement of a traffic analysis (pursuant to Pasadena Transportation Impact Review Current Practice and Guidelines) within the Lincoln Avenue Specific Plan, the project applicant shall prepare a traffic signal warrant analysis. This traffic study will determine whether the project will impact intersection locations, identified below. The signal warrant analysis shall be subject to review and approval by the City. If the project requires a signal warrant at those intersections or exceed the performance criteria, the project applicant shall to construct the required improvement. Traffic signal warrants shall be determined for the following intersections:

- Lincoln Avenue and Hammond Street (#8)
- Lincoln Avenue/Prospect Boulevard & Forest Avenue (#9)
- EB I-210 Ramps and Howard Street (#26)
- EB I-210 Ramps and Mountain Street (#29)
- WB I-210 Ramps and Mountain Street (#30)

11-2 Prior to the issuance of a building permit for new development or redevelopment within the specific plan, the project applicant shall contribute fair share funds to the Neighborhood Traffic Management Capital Improvement Program Fund Number 75210. The funds will be used to implement traffic management measures to protect neighborhoods potentially influenced by the project's traffic on the roadway segments listed below. The payment of funds shall be for the purpose of reducing impacts to the following roadway segments:

1. Lincoln Avenue south of Woodbury Road
2. Lincoln Avenue south of Idaho Street
3. Lincoln Avenue south of Howard Street
4. Lincoln Avenue south of Washington Boulevard
5. Lincoln Avenue south of Hammond Street

8. Woodbury Road west of Lincoln Avenue
9. Montana Street east of Lincoln Avenue
12. Idaho Street east of Lincoln Avenue
13. Howard Street west of Forest Avenue
14. Howard Street east of Lincoln Avenue
15. Howard Street west of Lincoln Avenue
16. Washington Boulevard east of Lincoln Avenue
17. Washington Boulevard west of Lincoln Avenue
19. Hammond Street west of Lincoln Avenue
20. Hammond Street east of Lincoln Avenue

iii. Findings Pursuant to CEQA Guidelines Section 15091

Changes or alterations have been required in, or incorporated into, the Plan which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

iv. Supporting Explanation (Including Cumulative Impacts)

Two scenarios are used in evaluating Plan traffic impacts. Direct impacts are evaluated using existing conditions as a baseline, in accord with *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351. Cumulative impacts are assessed using forecast traffic conditions in the project future year (2022).

Existing year plus project traffic conditions were estimated by adding project-generated trips assigned to the study area roadways to the existing traffic conditions. Summaries of the AM and PM peak hour level of service analyses results with and without the project are shown in the EIR at Tables 5.11-7 and Table 5.11-8,

respectively. The project would cause significant impacts to seven intersections during the AM peak hour and eleven intersections during the PM peak hour.

- Lincoln Avenue & Woodbury Road (#1)
- Lincoln Avenue & Montana Street (#2)
- Lincoln Avenue & Wyoming Street (#3)
- Lincoln Avenue & Idaho Street (#4)
- Lincoln Avenue & WB I-210 Ramps (#5)
- Lincoln Avenue & Howard Street (#6)
- Lincoln Avenue & Washington Boulevard (#7)
- Lincoln Avenue & Hammond Street (#8)
- Lincoln Avenue/Prospect Boulevard & Forest Avenue (#9)
- Lincoln Avenue & Mountain Street (#10)
- I-210 EB Ramps & Howard Street (#26)
- I-210 WB Ramps & Mountain Street (#30) (EIR, pp. 5.11-21 to 5.11-23.)

Under the existing plus project scenario, implementation of mitigation measures required to reduce significant impacts would be infeasible due to right-of-way constraints, inconsistency with the City's General Plan, and significant loss of parking within a parking deficient area. (EIR, pp. 5.11-64 to 5.11-66.)

Two scenarios were considered in the with-project future year 2022 analyses. The first scenario assumes that Lincoln Avenue remains a 4-lane facility throughout the length of the specific plan area. The second scenario, known as a "road diet," incorporates traffic calming measures such that Lincoln Avenue between Washington Boulevard and Forest Avenue becomes a two-lane facility. The proposed road diet would reduce the existing street to one travel lane in each direction. Under either scenario, the additional vehicle trips and roadway geometry changes are forecast to

result in significant impacts at nine signalized intersections during one or both peak periods and five unsignalized intersection:

Signalized Intersections

- Lincoln Avenue and Woodbury Road (#1)
- Lincoln Avenue & Montana Street (#2)
- Lincoln Avenue & Wyoming Street (#3)
- Lincoln Avenue & Idaho Street (#4)
- Lincoln Avenue and WB I-210 Ramps (#5)
- Lincoln Avenue & Howard Street (#6)
- Lincoln Avenue and Washington Boulevard (#7)
- Lincoln Avenue & Mountain Street (#10)
- Fair Oaks Avenue and Washington Boulevard (#23)

Unsignalized Intersection

- Lincoln Ave & Hammond St (#8)
- Lincoln Ave/Prospect Blvd & Forest Ave (#9)
- I-210 EB Ramps & Howard St (#26)
- I-210 EB Ramps & Mountain St (#29)
- I-210 WB Ramps and Mountain Street (#30) (EIR, p. 5.11-26.)

Implementation of mitigation measures required to reduce significant impacts of the Plan would be infeasible due to right-of-way constraints, inconsistency with the City's General Plan, and significant loss of parking within a parking deficient area. As a result, traffic impacts to nine signalized intersections and five unsignalized intersections under the future year cumulative baseline condition and cumulative baseline plus road diet condition would remain significant and unavoidable. Mitigation Measures 11-1 and 11-2 would reduce impacts to four signalized intersections and four unsignalized intersections. Caltrans is currently undergoing improvements to westbound I-210 and Mountain Street, which would mitigate any impacts generated by projects within the Specific Plan area. However, even with Mitigation Measures 11-1 and 11-2, impacts to