

**Exhibit F – Resolution and Findings,
Statement of Overriding Considerations,
and Mitigation Monitoring and Reporting Program**

1 RESOLUTION NO. R-

2
3 A RESOLUTION OF THE PLANNING COMMISSION
4 OF THE CITY OF LONG BEACH CERTIFYING THAT THE
5 FINAL ENVIRONMENTAL IMPACT REPORT FOR THE
6 DOWNTOWN PLAN (STATE CLEARINGHOUSE NO.
7 2009071006) HAS BEEN COMPLETED IN ACCORDANCE
8 WITH THE PROVISIONS OF THE CALIFORNIA
9 ENVIRONMENTAL QUALITY ACT AND STATE AND
10 LOCAL GUIDELINES AND MAKING CERTAIN FINDINGS
11 AND DETERMINATIONS RELATIVE THERETO;
12 ADOPTING A STATEMENT OF OVERRIDING
13 CONSIDERATIONS; AND ADOPTING A MITIGATION
14 MONITORING AND REPORTING PROGRAM (MMRP)

15
16 WHEREAS, City of Long Beach has directed the preparation of a Program
17 Environmental Impact Report (PEIR) to address the potential environmental effects that
18 may result from adoption and implementation of the proposed Long Beach Downtown
19 Plan. Said Project is more fully described in the Draft Program Environmental Impact
20 Report (DPEIR), a copy of which DPEIR and the Proposed Project description is
21 incorporated herein by this reference as though set forth in full, word for word.

22 WHEREAS, Project implementation will require a General Plan Amendment
23 to designate all property within the Downtown Plan project area to Land Use Designation
24 (LUD) # 7 (Mixed Uses) and whereas a list of discretionary approvals required for Project
25 implementation is set forth in the DPEIR.

26 WHEREAS, the City began an evaluation of the proposed project by issuing
27 a Notice of Preparation (NOP), circulated from June 29, 2009 to August 3, 2009. A
28 Notice of Completion was prepared and filed with the State Office of Planning and

1 Research on December 7, 2010. The Draft Environmental Impact Report was completed
2 on December 7, 2010, and circulated between December 10, 2010 to April 4, 2011, for a
3 one hundred and fifteen (115) day circulation period. Public scoping meetings and study
4 sessions were held on July 16, 2009, July 20, 2009, and July 22, 2009.

5 WHEREAS, implementation of the Project constitutes a "project" as defined
6 by CEQA, Public Resources Code Sections 21000 et seq., and the City of Long Beach is
7 the Lead Agency for the Project under CEQA;

8 WHEREAS, it was determined during the initial processing of the Project
9 that it could have potentially significant effects on the environment, requiring the
10 preparation of an EIR;

11 WHEREAS, the City prepared full and complete responses to the
12 comments received on the PEIR, and distributed the responses in accordance with Public
13 Resources Code Section 21092.5;

14 WHEREAS, the Planning Commission has reviewed and considered the
15 information in and the comments to the DPEIR and the responses thereto, the Final
16 Environmental Impact Report ("FEIR") at a duly noticed Planning Commission meeting
17 held on November 10, 2011, at which time evidence, both written and oral, was
18 presented to and considered by the Planning Commission;

19 WHEREAS, the Planning Commission has read and considered all
20 environmental documentation comprising the FEIR, including the DPEIR, comments and
21 the responses to comments, and errata included in the FEIR, and has determined that
22 the FEIR considers all potentially significant environmental impacts of the Project and is
23 complete and adequate and fully complies with all requirements of CEQA;

24 WHEREAS, the Planning Commission has evaluated and considered all
25 significant impacts, mitigation measures, and project alternatives identified in the FEIR;

26 WHEREAS, CEQA and the State CEQA Guidelines require that where the
27 decision of a public agency allows the occurrence of significant environmental effects that
28 are identified in the EIR, but are not mitigated to a level of insignificance, that the public

1 agency state in writing the reasons to support its action based on the EIR and/or other
2 information in the record; and

3 WHEREAS, it is the policy of the City, in accordance with the provisions of
4 CEQA and the State CEQA Guidelines, not to approve a project unless (i) all significant
5 environmental impacts have been avoided or substantially lessened to the extent
6 feasible, and (ii) any remaining unavoidable significant impacts are outweighed by
7 specific economic, legal, social, technological, or other benefits of the project, and
8 therefore considered "acceptable" under State CEQA Guidelines section 15093.

9 NOW, THEREFORE, the Planning Commission of the City of Long Beach
10 does hereby find, determine and resolve that:

11 Section 1. All of the above recitals are true and correct and are
12 incorporated herein as though fully set forth.

13 Section 2. The DPEIR has been completed in compliance with CEQA
14 and the State CEQA Guidelines.

15 Section 3. The FEIR, which reflects the Planning Commission's
16 independent judgment and analysis, is hereby adopted, approved, and certified as
17 complete and adequate under CEQA.

18 Section 4. Pursuant to Public Resources Code Section 21081 and State
19 CEQA Guidelines Section 15091, the Planning Commission has reviewed and hereby
20 adopts the Facts, Findings and Statement of Overriding Considerations regarding the
21 environmental effects for the Downtown Plan as shown on the attached Exhibit "A", which
22 document is incorporated herein by reference as though set forth in full, word for word.

23 Section 5. Although the FEIR identifies certain significant environmental
24 effects that would result if the Project is approved, most environmental effects can
25 feasibly be avoided or mitigated and will be avoided or mitigated by the imposition of
26 mitigation measures included with the FEIR. Pursuant to Public Resources Code Section
27 21081.6, the Planning Commission has reviewed and hereby adopts the Mitigation
28 Monitoring and Reporting Program ("MMRP") as shown on the attached Exhibit "B",

1 which document is incorporated herein by reference as though set forth in full, word for
2 word, together with any adopted corrections or modifications thereto, and further finds
3 that the mitigation measures identified in the FEIR are feasible, and specifically makes
4 each mitigation measure a condition of project approval.

5 Section 6. Pursuant to State CEQA Guidelines Section 15091(e), the
6 record of proceedings relating to this matter has been made available to the public at,
7 among other places, the Department of Development Services, 333 West Ocean
8 Boulevard, 5th Floor, Long Beach, California, and is, and has been, available for review
9 during normal business hours.

10 Section 7. The information provided in the various staff reports submitted
11 in connection with the Project, the corrections and modifications to the DPEIR, and FEIR
12 made in response to comments and any errata which were not previously re-circulated,
13 and the evidence presented in written and oral testimony at the public hearing, do not
14 represent significant new information so as to require re-circulation of the DPEIR or the
15 FEIR pursuant to the Public Resources Code.

16 Section 8. This resolution shall take effect immediately upon its adoption
17 by the Planning Commission, and the Planning Commission Secretary shall certify to the
18 vote adopting this resolution.

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I hereby certify that the foregoing resolution was adopted by the Planning Commission of the City of Long Beach at its meeting of _____, 2011, by the following vote:

Ayes: Commissioners: _____

Noes: Commissioners: _____

Absent: Commissioners: _____

Planning Commission Secretary

OFFICE OF THE CITY ATTORNEY
ROBERT E. SHANNON, City Attorney
333 West Ocean Boulevard, 11th Floor
Long Beach, CA 90802-4664

CITY OF LONG BEACH RESOLUTION NO. _____

EXHIBIT "A"

**FACTS, FINDINGS AND STATEMENT OF OVERRIDING
CONSIDERATIONS REGARDING THE ENVIRONMENTAL
EFFECTS FOR THE LONG BEACH DOWNTOWN PLAN**

**SCH # 2009071006
City EIR No. 04-08**

Lead Agency:
City of Long Beach
333 W. Ocean Boulevard
Long Beach, California 90802
Contact: Mr. Steve Gerhardt, Senior Planner
(562) 570-6288

October 2011

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STATEMENT OF FACTS AND FINDINGS

I INTRODUCTION

The California Environmental Quality Act (CEQA) requires that a Lead Agency issue two sets of findings prior to approving a project that will generate a significant impact on the environment. The Statement of Facts and Findings is the first set of findings where the Lead Agency identifies the significant impacts, presents facts supporting the conclusions reached in the analysis, makes one or more of three findings for each impact, and explains the reasoning behind the agency's findings.

The following statement of facts and findings has been prepared in accordance with the California Environmental Quality Act (CEQA) and Public Resources Code Section 21081. CEQA Guidelines Section 15091 (a) provides that:

No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.

There are three possible finding categories available for the Statement of Facts and Findings pursuant to Section 15091 (a) of the CEQA Guidelines.

- (1) Changes or alterations have been required in, or incorporated into, the project which avoids or substantially lessens the significant environmental effect as identified in the final EIR.*
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.*
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.*

These findings relevant to the project are presented in Sections V and VI.

The Statement of Overriding Considerations is the second set of findings. Where a project will cause unavoidable significant impacts, the Lead Agency may still approve the project where its benefits outweigh the adverse impacts. Further, as provided in the Statement of Overriding Considerations, the Lead Agency sets forth specific reasoning by which benefits are balanced against effects, and approves the project.

The City of Long Beach, the CEQA Lead Agency, finds and declares that the proposed Long Beach Downtown Plan Program Environmental Impact Report (PEIR) has been completed in compliance with CEQA and the *CEQA Guidelines*. The City of Long Beach finds and certifies that the PEIR was reviewed and information contained in the PEIR was considered prior to any approval associated with the proposed Long Beach Downtown Plan, herein referred to as the "project."

Based upon its review of the PEIR, the Lead Agency finds that the PEIR is an adequate assessment of the potentially significant environmental impacts of the proposed project, represents the independent judgment of the Lead Agency, and sets forth an adequate range of alternatives to this project. The City of Long Beach Planning Commission certified the PEIR at its hearing of November 10, 2011.

The Final PEIR is comprised of the following elements:

- Draft Long Beach Downtown Plan Program Environmental Impact Report, December 2010;
- Responses to Comments on the Draft PEIR, October 2011;
- Errata and Corrections and Additions to the Draft PEIR; and
- Mitigation monitoring and reporting program.

The remainder of this document is organized as follows:

- II. Description of project proposed for approval;
- III. Effects determined to be less than significant in the Initial Study/Notice of Preparation;
- IV. Effects determined to be less than significant;
- V. Effects determined to be less than significant with mitigation and findings;
- VI. Environmental effects that remain significant and unavoidable after mitigation and findings; and
- VII. Alternatives to the proposed project.
- VIII. Statement of Overriding Considerations

II DESCRIPTION OF PROPOSAL

The proposed project is the adoption and implementation of the Long Beach Downtown Plan, which would replace the existing land use, zoning, and planned development districts as the land use and design document for all future development in the proposed Downtown Plan Project area. The Downtown Plan incorporates zoning, development standards, and design guidelines to be followed in implementing the Plan. Full implementation of the Downtown Plan could increase the density and intensity of existing Downtown land uses by allowing up to approximately: (1) 5,000 new residential units; (2) 1.5 million square feet of new office, civic, cultural, and similar uses; (3) 384,000 square feet of new retail; (4) 96,000 square feet of restaurants; and (5) 800 new hotel rooms. The additional development assumed in the Downtown Plan could occur over a 25-year time period.

A Potential Downtown Project Area Expansion was identified for an area north of 7th Street, between Elm and Pine Avenues. An additional area of 94[JP1]acres was also added to the Project, which extended the north boundary from 10th Street to Anaheim Street. This added area includes both sides of Pacific Avenue, both sides of Long Beach Boulevard, and the west side of Elm Avenue between 11th Street and Anaheim Street. The original buildout projections for the proposed Downtown Plan that were estimated have been reduced after further study and the additional areas described above have been included in the impact analysis contained in the PEIR.

III EFFECTS DETERMINED TO BE LESS THAN SIGNIFICANT IN THE INITIAL STUDY/NOTICE OF PREPARATION

The Initial Study prepared for the project and circulated with a Notice of Preparation (NOP) of a Draft PEIR found that the proposed project would have a less than significant impact with respect to a number of environmental topics. A less than significant environmental impact determination was made for each topic area listed below.

AESTHETICS

Scenic vistas/resources. The project area is densely urbanized and includes existing high-rise development. View corridors would not be impacted by development, and the proposed project includes provisions to maintain existing view corridors.

AGRICULTURE RESOURCES

Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project area is fully developed within an urbanized area and is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No agricultural or other related activities occur within or adjacent to the project area. Therefore, no impacts to farmland would occur.

Conflict with existing zoning for agricultural use or a Williamson Act contract. The Project area contains a variety of commercial, residential, civic, and cultural uses. The most common existing General Plan Land Use District (LUD) within the Project area is LUD 7 Mixed-Use; and the most common zones are Planned Development (PD)-30 and PD-29. No agricultural zoning is present in the surrounding area and no nearby lands are enrolled under the Williamson Act. Therefore, no conflict with agricultural zoning of Williamson Act contracts would occur.

Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. No agricultural uses exist in the project area or in the project vicinity, and no portion of the project area is zoned for agricultural use. Thus, the proposed project would not involve the conversion of farmland to non-agricultural uses. No impact to agricultural land or uses would occur.

BIOLOGICAL RESOURCES

Substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFG or USFWS. The project area is a fully developed commercial lot that contains a variety of urban uses. The site does not contain native habitat areas and landscaping is comprised of non-native ornamental plants. Surrounding properties are also developed. The proposed project would have a less than significant impact, either directly or through habitat modification, on any species identified as a candidate, sensitive, or

special status species in local or regional plans, policies, or regulations by the CDFG or USFWS.

Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations by the CDFG or USFWS. The proposed project is not located on or adjacent to any riparian habitat or sensitive natural community. In addition, no portion of the site is considered riparian habitat or a sensitive natural community. Therefore, the project would have a less than significant adverse effect on riparian habitat or other natural communities identified in the City or regional plans, policies, or regulations by the CDFG or USFWS.

Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. The project area is already fully developed and located within an urbanized area. The project area does not support any biologically significant wildlife movement nor does it contain or support native wildlife nursery sites. The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

GEOLOGY AND SEISMICITY

Landslides, soil erosion/loss of top soil. The relatively level site conditions and extent of developed lands in the project area would avoid potential impacts associated with landslides, erosion, and loss of top soil.

On-site septic systems. All development in the project area would be served by the City's sewage disposal system.

HAZARDS AND HAZARDOUS MATERIALS

Airport safety hazards. The nearest boundary of the project area is located approximately three miles from the nearest airport/airstrip.

Emergency plans. The project may propose to alter existing street patterns, but would maintain accessibility required.

Wildland fire hazard. The project area does not contain wildlands nor is it adjacent to wildlands.

HYDROLOGY AND WATER QUALITY

100-year flood zone/flooding. The project area is located outside of the 100-year flood zone.

Dam or levee failure. There are no dams or levees located within the vicinity of the project area.

Seiches and tsunamis. The project area is substantially protected from inundation from seiches and tsunamis by its elevation, as well as by the Long Beach Harbor breakwater and existing development along Ocean Boulevard.

LAND USE AND PLANNING

Divide an established community. The proposed plan provides guidelines and standards for infill development that are intended to integrate future development into the existing land use character.

Conflict with the local HCP. No habitat conservation plan applies to the project area.

MINERAL RESOURCES

Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Petroleum is the primary mineral resource within Long Beach. The project area is not classified by the City as an area containing significant deposits of oil, gas, or other mineral deposits. In addition, the project area is not currently utilized for oil extraction, nor are oil or other mineral deposits known to occur within the project area.

Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. The Long Beach General Plan and other specific plans and land use plans do not identify the project area as an important mineral resource recovery location. Project implementation would not result in impacts associated with loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

NOISE

Aircraft noise. The nearest boundary of the project area is located approximately three miles from the nearest airport/airstrip.

TRANSPORTATION AND TRAFFIC

Air traffic patterns. The nearest boundary of the project area is located approximately three miles from the nearest airport/airstrip.

Alternative transportation. The project would support adopted policies for providing alternative transportation modes.

IV EFFECTS DETERMINED TO BE LESS THAN SIGNIFICANT IN THE PEIR

The City of Long Beach found that the proposed project would have a less than significant impact with respect to a number of environmental topics discussed in the PEIR, without the need for mitigation. A less than significant environmental impact determination was made for each topic area listed below.

AESTHETICS

Project Effects on Visual Character. The visual character of the Downtown Plan Project area would be altered through the introduction of additional high-rise structures and full-block complexes at locations within the project area. However, due to the design framework provided by the Plan for future development projects, and the desire for quality development to occur over time by the Plan to be compatible with existing development patterns and enhance the visual environment, including the Downtown skyline, the aesthetic change of the visual character within Downtown is expected to be beneficial, and is considered a Class III, *less-than-significant impact*.

AIR QUALITY

Local mobile-source CO emissions. Local mobile-source CO emissions associated with implementation of the proposed Downtown Plan would not result in or substantially contribute to concentrations that exceed the 1-hour ambient air quality standard of 20 parts per million (ppm) or the 8-hour standard of 9 ppm. Impacts would be Class III, *less than significant*.

Generation of objectionable odors during construction activities. Project construction activities associated with the development of onsite land uses could result in odorous emissions from diesel exhaust generated by construction equipment. During some periods of the 25-year buildout of the project, intense levels of construction activity could potentially occur in close proximity to existing or future-planned sensitive receptors or construction activity could potentially occur near sensitive receptors for an extended period of time. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. The impact would be *less than significant*.

LAND USE

Conflict with land use plans, policies, or regulations. A significant land use and planning impact would occur if the proposed Downtown Plan would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The City has sole land use jurisdiction within the proposed project area and has the authority to replace existing land use district and zoning regulations. Therefore, impacts would be Class III, *less than significant*.

NOISE

Expose persons to or generation of excessive groundbourne vibration. The proposed Downtown Plan would facilitate land uses that would create vibration sources. These sources typically do not generate substantial vibrations at distance and would be required to comply with the City's Municipal Code. Impacts would be Class III, *less than significant*.

Expose persons to traffic noise. Implementation of the proposed Downtown Plan would generate traffic noise level increases directly attributable to the project that are estimated to be no greater than a 1 decibel (dB) increase over future traffic noise without the project. This 1 dB increase would not be perceptible; therefore, the project's noise impact would be Class III, *less than significant*.

PUBLIC SERVICES

Schools. The Downtown Plan would generate an estimated 670 school-age students. This could adversely affect school facilities. However, with payment of required school impact fees, impacts would be Class III, *less than significant*.

Fire. The proposed project would incrementally increase demands on the Long Beach Fire Department. However, this increase would not require the construction of new fire protection facilities. Therefore, this this impact would be Class III, *less than significant*.

Police. The proposed project would incrementally increase demands on the Long Beach Police Department and may require expansion facilities or replacement of existing facilities. However, the potential impact from construction of new police protection facilities would be similar to the impact from construction of new commercial, civic, and residential development that is addressed in this PEIR. Therefore, this impact would be Class III, *less than significant*.

Libraries. Buildout of the proposed project would incrementally increase demand for library services in the City, and may cause demands for library services to exceed the capacity of the Main Library and at branch libraries that serve the project area. Expansion of the Main Library or development of an additional branch library to serve the Downtown may be necessary during the life of the plan. However, the potential impact from construction of new library facilities would be similar to the impact from construction of new commercial, civic, and residential development that is addressed in this PEIR. Therefore, this impact would be Class III, *less than significant*.

TRANSPORTATION AND TRAFFIC

Emergency access. The Downtown Plan would not alter through-traffic operations for emergency vehicles, nor would it eliminate existing roads or cause more circuitous access conditions. Therefore, impacts would be Class III, *less than significant* and mitigation is not required.

Inadequate parking capacity. With more than 30 parking garages and numerous places to park on the street, there is an adequate supply of Downtown parking spaces. The Parking and Access Strategic Plan describes parking management issues and strategies identified from stakeholder input to promote and complement transit and other alternative transportation modes so that there will continue to be adequate parking in the Project area. Therefore, impacts would be Class III, *less than significant*.

UTILITIES AND SERVICE SYSTEMS

Water. Buildout of the proposed Project would incrementally increase water demand in the City. However, LBWD water supplies are sufficient to meet the projected demand. Therefore, the impact on water supply and demand would be Class III, *less than significant*.

Wastewater. Buildout of the proposed project would incrementally increase wastewater treatment demand in the City. However, treatment infrastructure serving the City has sufficient excess capacity to meet anticipated peak flow demands. Therefore, the impact on wastewater would be Class III, *less than significant*.

V EFFECTS DETERMINED TO BE LESS THAN SIGNIFICANT WITH MITIGATION AND FINDINGS

The City of Long Beach, having reviewed and considered the information contained in the Final PEIR, the Technical Appendices and the administrative record, finds, pursuant to California Public Resources Code 21081 (a)(1) and *CEQA Guidelines* 15091 (a)(1) that changes or alterations have been required in, or incorporated into, the proposed project which would avoid or substantially lessen to below a level of significance the following potentially significant environmental effects identified in the Final PEIR in the following categories: Aesthetics, Air Quality, Cultural Resources, Geology and Seismicity, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Population and Housing, and Utilities and Service Systems. The potentially significant adverse environmental impacts that can be mitigated are listed below. The City of Long Beach finds that these potentially significant adverse impacts can be mitigated to a less than significant level after implementation of mitigation measures identified in the Final PEIR.

AESTHETICS

Create a new source of light and glare. Development of future projects within the Downtown Plan Project area would result in new sources of light and glare due to the increased height and scale of future development, as well as from the increased proportion of glazing on building façades and potential use of reflective materials such as aluminum and glass typical of contemporary design in comparison to existing styles of development from previous eras. This is, in part, a desired outcome in creating a vibrant urban environment, a key objective of the proposed project. This is a significant but mitigable impact.

Finding

- *Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential light and glare impacts associated with future development have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- AES-2(a) Lighting Plans and Specifications.** Prior to the issuance of building permits for new large development projects, the applicant shall submit lighting plans and specifications for all exterior lighting fixtures and light standards to the Development Services Department for review and approval. The plans shall include a photometric design study demonstrating that all outdoor light fixtures to be installed are designed or located in a manner as to contain the direct rays from the lights onsite and to minimize spillover of light onto surrounding properties or roadways. All parking structure lighting shall be

shielded and directed away from residential uses. Rooftop decks and other similar amenities are encouraged in the Plan. Lighting for such features shall be designed so that light is directed so as to provide adequate security and minimal spill-over or nuisance lighting.

AES-2(b) Building Material Specifications. Prior to the issuance of any building permits for development projects, applicants shall submit plans and specifications for all building materials to the Development Services Department for review and approval. The Plan provides measures to ensure that the highest quality materials are used for new development projects. This is an important consideration, since high-quality materials last longer. Quality development provides an impression of permanence and can encourage additional private investment in Downtown Long Beach.

AES-2(c) Light Fixture Shielding. Prior to the issuance of building permits for development projects within the Downtown Plan project area, applicants shall demonstrate to the Development Services Department that all night lighting installed on private property within the project area shall be shielded, directed away from residential and other light-sensitive uses, and confined to the project site. Rooftop lighting, including rooftop decks, security lighting, or aviation warning lights, shall be in accordance with Airport/Federal Aviation Administration (FAA) requirements. Additionally, all lighting shall comply with all applicable Airport Land Use Plan (ALUP) Safety Policies and FAA regulations.

AES-2(d) Window Tinting. Prior to the issuance of any building permits, the applicant shall submit plans and specifications showing that building windows are manufactured or tinted to minimize glare from interior lighting and to minimize heat gain in accordance with energy conservation measures.

AIR QUALITY

Exposure of sensitive receptors to odors. Long-term operation of the project could result in the frequent exposure of sensitive receptors to substantial objectionable odor emissions. Impacts from long-term operation would be significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential exposure of sensitive receptors to odor associated with the operational phase of the project have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

AQ-6 The following mitigation measures shall be implemented to control exposure of sensitive receptors to operational odorous emissions. The City shall ensure that all project applicant(s) implement the following measures:

- The City shall consider the odor-producing potential of land uses when reviewing future development proposals and when the exact type of facility that would occupy areas zoned for commercial, industrial, or mixed-use land uses is determined. Facilities that have the potential to emit objectionable odors shall be located as far away as feasible from existing and proposed sensitive receptors.
- Before the approval of building permits, odor-control devices shall be identified to mitigate the exposure of receptors to objectionable odors if a potential odor-producing source is to occupy an area zoned for commercial land use. The identified odor-control devices shall be installed before the issuance of certificates of occupancy for the potentially odor-producing use. The odor-producing potential of a source and control devices shall be determined in coordination with SCAQMD and based on the number of complaints associated with existing sources of the same nature.
- Truck loading docks and delivery areas shall be located as far away as feasible from existing and proposed sensitive receptors.
- Signs shall be posted at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by California's Office of Administrative Law in January 2005. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.)
- Proposed commercial and industrial land uses that have the potential to host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.)

In addition, mitigation measures identified under AQ-4(b) to reduce indoor exposure to TACs would also result in a reduction in the intensity of offensive odors from the surrounding odor sources.

CULTURAL RESOURCES

Potential exists for archaeological resource find. Due to the lack of natural ground surfaces in the Project area, no surveys can be conducted prior to onset of demolition or other ground-disturbing activities. The potential exists for such activities to encounter and damage archaeological resources. This impact would be significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential cultural resource impacts associated with archaeological deposits have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- CR-2(a)** A qualified project archaeologist or archaeological monitor approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of cultural resources. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities to allow the find to be evaluated. If the archaeological monitor determines the find to be significant, the project applicant and the City shall be notified and an appropriate treatment plan for the resources shall be prepared. The treatment plan shall include notification of a Native American representative and shall consider whether the resource should be preserved in place or removed to an appropriate repository as identified by the City.
- CR-2(b)** The project archaeologist shall prepare a final report of the find for review and approval by the City and shall include a description of the resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historic Resources and the National Register of Historic Places. The report shall be filed with the California Historic Resources Information System South Central Coastal Information Center. If the resources are found to be significant, a separate report including the results of the recovery and evaluation process shall be prepared.
- CR-2(c)** If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code

Section 5097.98. If the remains are determined to be of Native American descent, the corner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains. Preservation in place and project design alternatives shall be considered as possible courses of action by the project applicant, the City, and the Most Likely Descendent.

Directly or indirectly destroy a paleontological resource. Due to the lack of natural ground surfaces in the Project area, no surveys can be conducted prior to onset of demolition or other ground-disturbing activities. The potential exists for such activities to encounter and damage paleontological resources. This impact would be significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential cultural resource impacts associated with paleontological deposits have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- CR-3(a)** A qualified paleontologist approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of paleontological resources. Monitoring shall consist of visually inspecting fresh exposures of rock for fossil remains and, where appropriate, collection of sediment samples for further analysis. The frequency of inspections shall be based on the rate of excavation and grading activities, the materials being excavated, the depth of excavation, and, if found, the abundance and type of fossils encountered.
- CR-3(b)** If a potential fossil is found, the paleontologist shall be allowed to temporarily divert or redirect excavation and grading in the area of the exposed fossil to evaluate and, if necessary, salvage the find. All fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County and shall be accompanied by a report on the fossils collected and their significance, and notes, maps, and photographs of the salvage effort.

GEOLOGY AND SEISMICITY

Substantial adverse effects from seismically induced ground shaking. Seismically induced ground shaking could damage existing and proposed structures in the project area and could expose people or structures to potential substantial risk of loss, injury, or death. Compliance with mitigation measures identified in the PEIR would reduce impacts to a significant but mitigable level.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Draft PEIR.*

Facts in Support of Finding

The potential impacts from seismically induced ground shaking as a result of the proposed project have been eliminated or substantially lessened to a less than significant level by virtue of a mitigation measure identified in the PEIR.

Mitigation Measure:

- Geo-1** New construction or structural remodeling of buildings proposed within the Plan area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.

Seismic activity could induce liquefaction. Seismic activity could induce ground shaking that results in liquefaction that could cause structural failure and potential substantial risk of loss, injury, or death. Compliance with mitigation measures identified herein would reduce impacts to a significant but mitigable level.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts associated with seismic activity could induce liquefaction on the project area have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- Geo-2** Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.

Expansive soils may be encountered. The potential exists within the project area to encounter expansive soils or soils that are unstable or would become unstable as a result of new development. These conditions could result in onsite or offsite lateral spreading or subsidence. Compliance with mitigation measures identified herein would reduce impacts to a significant but mitigable level.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts associated with expansive soils in the project area have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- Geo-3** Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. For areas where the expansion index is found to be greater than 20, grading and foundation designs shall be engineered to withstand the existing conditions. The expansion testing may

be omitted if the grading and foundations are engineered to withstand the presence of highly expansive soils.

HAZARDS AND HAZARDOUS MATERIALS

Hazard due to demolition of existing structures. The types of commercial and residential land uses envisioned for the Project area would not typically contain businesses involved in the transport, use, or disposal of substantial quantities of hazardous materials. Therefore, hazardous materials impacts to residences, schools, or other properties would not be expected to result from transport, use, or disposal of hazardous materials from businesses anticipated to locate within the project area. However, many future construction projects would involve full or partial demolition of existing structures, some of which, due to their age, may contain asbestos and lead-based paints and materials. Compliance with mitigation measures identified herein would reduce impacts to significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to release of hazardous materials have been eliminated or substantially lessened to a less than significant level by virtue of a mitigation measure identified in the PEIR.

Mitigation Measure:

- Haz-1(a)** Prior to issuance of a demolition or renovation permit, a lead-based paint and asbestos survey shall be performed by a licensed sampling company. The lead-based paint survey shall be prepared for any structures pre-dating 1982; an asbestos survey shall be performed for asbestos-containing insulation for any structure pre-dating 1986; and an asbestos survey shall be performed for asbestos-containing drywall for all structures for which drywall is to be removed. All testing procedures shall follow California and federal protocol. The lead-based paint and asbestos survey report shall quantify the areas of lead-based paint and asbestos-containing materials pursuant to California and federal standards.
- Haz-1(b)** Prior to any demolition or renovation, onsite structures that contain asbestos must have the asbestos-containing material removed according to proper abatement procedures recommended by the asbestos consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only asbestos trained and certified abatement personnel shall be allowed to perform asbestos abatement. All asbestos-containing material removed from onsite structures shall be hauled to a licensed receiving facility and disposed of under proper manifest by a

transportation company certified to handle asbestos. Following completion of the asbestos abatement, the asbestos consultant shall provide a report documenting the abatement procedures used, the volume of asbestos-containing material removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party and a copy shall be submitted to the City of Long Beach prior to issuance of a demolition or construction permit.

- Haz-1(c)** Prior to the issuance of a permit for the renovation or demolition of any structure, a licensed lead-based paint consultant shall be contracted to evaluate the structure for lead-based paint. If lead-based paint is discovered, it shall be removed according to proper abatement procedures recommended by the consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only lead-based paint trained and certified abatement personnel shall be allowed to perform abatement activities. All lead-based paint removed from these structures shall be hauled and disposed of by a transportation company licensed to transport this type of material. In addition, the material shall be taken to a landfill or receiving facility licensed to accept the waste. Following completion of the lead-based paint abatement, the lead-based paint consultant shall provide a report documenting the abatement procedures used, the volume of lead-based paint removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party, with a copy submitted to the City of Long Beach prior to issuance of a demolition or construction permit.

Demolition or renovation may be expose schools to hazardous materials. A total of six schools are located within the Project area and three others are within 1/4-mile. Demolition or renovation activities within 1/4-mile of these schools could expose children to release of hazardous materials, particularly while walking to and from school and during time spent outside classrooms. Compliance with Mitigation Measures Haz-1 would reduce impacts to significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to exposure of schools to hazardous materials have been eliminated or substantially lessened to a less than significant level by virtue of a mitigation measure identified in the PEIR.

Mitigation Measure:

Refer to Mitigation Measure Haz-1.

Hazard due to contaminated soils. Historic activity involving industrial uses and storage of hydrocarbons, heavy metals, and acids on properties within the Project area may have contaminated onsite soils and/or groundwater quality. Impacts relating to potential contamination would be significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to contaminated soils have been eliminated or substantially lessened to a less than significant level by virtue of a mitigation measure identified in the PEIR.

Mitigation Measure:

- Haz-3(a)** All excavation and demolition projects conducted within the project area shall be required to prepare a contingency plan to identify appropriate measures to be followed if contaminants are found or suspected or if structural features that could be associated with contaminants or hazardous materials are suspected or discovered. The contingency plan shall identify personnel to be notified, emergency contacts, and a sampling protocol to be implemented. The excavation and demolition contractors shall be made aware of the possibility of encountering unknown hazardous materials and shall be provided with appropriate contact and notification information. The contingency plan shall include a provision stating under what circumstances it would be safe to continue with the excavation or demolition, and shall identify the person authorized to make that determination.
- Haz-3(b)** If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (Long Beach/Signal Hill Certified Unified Program Agency [CUPA], LARWQCB, or the state DTSC). Prior to any other ground disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received.
- Haz-3(c)** If concentrations of contaminants warrant site remediation, contaminated materials shall be remediated either prior to construction of structures or concurrent with construction. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation. The remediation program shall also be approved

by a regulatory oversight agency (Long Beach/Signal Hill CUPA, LARWQCB, or the state DTSC). All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, the analytical results after completion of the remediation, and all waste disposal or treatment manifests.

- Haz-3(d)** If during the soil sampling, groundwater contamination is suspected or soil contamination is detected at depths at which groundwater could be encountered during demolition or construction, a groundwater sampling assessment shall be performed. If contaminants are detected in groundwater at levels that exceed maximum contaminant levels for those constituents in drinking water, or if the contaminants exceed health risk standards such as Preliminary Remediation Goals, 1 in 1 million cancer risk, or a health risk index above 1, the results of the groundwater sampling shall be forwarded to the appropriate regulatory agency (Long Beach/Signal Hill CUPA, LARWQCB, or the State DTSC). Prior to any other ground-disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received.

HYDROLOGY AND WATER QUALITY

Urban pollutants may discharge to City drainage system. Construction activities associated with future development of residential, hotels, offices, and other uses could result in discharges of urban pollutants into the City drainage system. This would include runoff from grading and excavation; fuel, lubricants, and solvents from construction vehicles and machinery; and trash and other debris. This would result in a significant adverse impact on water quality. Impacts would be significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to discharge of urban pollutants to the City drainage system as a result of the proposed project have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- Hydro-1** Prior to issuance of a grading permit, the City Department of Development Services shall determine the need for the developer to prepare a SWPPP for the site. If required, the SWPPP shall be submitted for review and approval

by the Department of Development Services prior to the issuance of any grading or building permits. The SWPPP shall fully comply with City and LARWQCB requirements and shall contain specific BMPs to be implemented during project construction to reduce erosion and sedimentation to the maximum extent practicable. The following BMPs or equivalent measures to control pollutant runoff shall be included within the project's grading and construction plans, if applicable:

Pollutant Escape: Deterrence

- Cover all storage areas, including soil piles, fuel and chemical depots. Protect from rain and wind with plastic sheets and temporary roofs.
- Implement tracking controls to reduce the tracking of sediment and debris from the construction site. At a minimum, entrances and exits shall be inspected daily and controls implemented as needed.
- Implement street sweeping and vacuuming as needed and as required.

Pollutant Containment Areas

- Locate all construction-related equipment and related processes that contain or generate pollutants (i.e., fuel, lubricants, solvents, cement dust, and slurry) in isolated areas with proper protection from escape.
- Locate construction-related equipment and processes that contain or generate pollutants in secure areas, away from storm drains and gutters.
- Place construction-related equipment and processes that contain or generate pollutants in bermed and plastic-lined depressions to contain all materials within that site in the event of accidental release or spill.
- Park, fuel, and clean all vehicles and equipment in one designated, contained area.

Pollutant Detainment Methods

- Protect downstream drainages from escaping pollutants by capturing materials carried in runoff and preventing transport from the site. Examples of detainment methods that retard movement of water and separate sediment and other contaminants are silt fences, hay bales, sand bags, berms, and silt and debris basins.

Recycling/Disposal

- Develop a protocol for maintaining a clean site. This includes proper recycling of construction-related materials and equipment fluids (i.e., concrete dust, cutting slurry, motor oil, and lubricants).
- Provide disposal facilities. Develop a protocol for cleanup and disposal of small construction wastes (i.e., dry concrete).

Hazardous Materials Identification and Response

- Develop a protocol for identifying risk operations and materials. Include protocol for identifying source and distribution of spilled materials.
- Provide a protocol for proper clean-up of equipment and construction materials, and disposal of spilled substances and associated cleanup materials.
- Provide an emergency response plan that includes contingencies for assembling response teams and immediately notifying appropriate agencies.

Urban pollutants may adversely affect surface water and groundwater quality. Future development would generate various urban pollutants such as soil, herbicides, and pesticides that could adversely affect surface water and groundwater quality in the project area watershed. This would result in a significant adverse impact on water quality. Impacts would be significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to surface water and groundwater quality as a result of the proposed project have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- Hydro-2** Prior to issuance of a building permit, the Department of Development Services shall determine the need for the developer to prepare a SUSMP for the site. If required, the SUSMP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any building permits. The City's review shall include a determination of whether installation of pollutant removal technology in existing or proposed storm drains adjacent to the project site should be required. The City's review is required to confirm that the SUSMP is consistent with the City's NPDES Permit No. CAS 004003 or a subsequently issued NPDES permit applicable at the time of project construction. A SUSMP consistent with the City's NPDES permit shall be incorporated into the project design plans prior to issuance of any building permits.

Increase of impervious surface could increase stormwater discharge. The increased land use intensity of future residential and commercial uses allowed by the proposed Downtown Plan could increase impervious surfaces and result in an increased volume of stormwater discharges

into the existing storm drain infrastructure. This would result in a significant adverse impact on the local hydrologic system. Impacts would be significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to an increase in impervious surfaces and potentially increasing stormwater discharges as a result of the proposed project have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- Hydro-3** Prior to issuance of a building permit, the City Stormwater Management Division shall determine the need for the developer to conduct an analysis of the existing stormwater drainage system and to identify improvements needed to accommodate any projected increased runoff that would result from the proposed project. The evaluation conducted by the developer shall include a determination of whether Low Impact Development (LID) practices and strategies should be incorporated into the project to reduce post-development peak stormwater runoff discharge rates to not exceed the estimated pre-development discharge rates.

NOISE

Construction activities may expose residents to increased noise levels. Implementation of the proposed Downtown Plan would create noise from construction activities that would expose local residents to temporary or periodic substantial noise level increases. While there is a potential for a significant adverse noise impact, compliance with mitigation measures identified herein would reduce impacts to significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential noise impacts related to construction of the proposed project have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

Noise-1(a) The following measures shall be applied to proposed construction projects that are determined to have potential noise impacts from removal of existing pavement and structures, site grading and excavation, pile driving, building framing, and concrete pours and paving:

- All internal combustion-engine-driven equipment shall be equipped with mufflers that are in good operating condition and appropriate for the equipment.
- “Quiet” models of air compressors and other stationary construction equipment shall be employed where such technology exists.
- Stationary noise-generating equipment shall be located as far as reasonable from sensitive receptors when sensitive receptors adjoin or are within 150 feet of a construction site.
- Unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes) shall be prohibited.
- Foundation pile holes shall be predrilled, as feasible based on geologic conditions, to minimize the number of impacts required to seat the pile.
- Construction-related traffic shall be routed along major roadways and away from noise-sensitive receptors.
- Construction activities, including the loading and unloading of materials and truck movements, shall be limited to the hours specified in the City Noise Ordinance (Section 8.80.202).
- Businesses, residences, and noise-sensitive land uses within 150 feet of construction sites shall be notified of the construction in writing. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of the complaint and response procedure.
- Each project implemented as part of the Plan shall designate a “construction liaison” that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. A telephone number for the liaison shall be conspicuously posted at the construction site.
- If a noise complaint(s) is registered, the liaison, or project representative, shall retain a City-approved noise consultant to conduct noise measurements at the location that registered the complaint. The noise measurements shall be conducted for a minimum of 1 hour and shall include 1-minute intervals. The consultant shall prepare a letter report summarizing the measurements and potential measures to reduce noise levels to the maximum extent feasible. The letter report shall include all measurement and calculation data used in determining impacts and

resolutions. The letter report shall be provided to code enforcement for determining the adequacy and if the recommendations are adequate.

Noise-1(b) The City will require the following measures, where applicable based on noise level of source, proximity of receptors, and presence of intervening structures, to be incorporated into contract specifications for construction projects within 150 feet of existing residential uses implemented under the proposed Plan:

- Temporary noise barriers shall be constructed around construction sites adjacent to, or within 150 feet of, operational business, residences, or other noise-sensitive land uses. Temporary noise barriers shall be constructed of material with a minimum weight of 4 pounds per square foot with no gaps or perforations. Noise barriers may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales.
- If a project-specific noise analysis determines that the barriers described above would not be sufficient to avoid a significant construction noise impact, a temporary sound control blanket barrier, shall be erected along building façades facing construction sites. This mitigation would only be necessary if conflicts occurred that were irresolvable by proper scheduling and other means of noise control were unavailable. The sound blankets are required to have a minimum breaking and tear strength of 120 pounds and 30 pounds, respectively. The sound blankets shall have a minimum sound transmission classification of 27 and noise reduction coefficient of 0.70. The sound blankets shall be of sufficient length to extend from the top of the building and drape on the ground or be sealed at the ground. The sound blankets shall have a minimum overlap of 2 inches.

Sensitive receptors may be located in areas that exceed noise standards. The proposed Downtown Plan would allow the location of sensitive receptors in areas that would exceed the standards identified for the applicable land use by the Noise Element of the Long Beach General Plan. While there is a potential for a significant adverse impact related to noise compatibility, compliance with mitigation measures identified herein would reduce impacts to significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to location of sensitive receptors in areas that would exceed noise level standards have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- Noise-5** In areas where new residential development would be exposed than L_{dn} of greater than 65 dBA, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following:
- Utilize site planning to minimize noise in shared residential outdoor activity areas by locating the areas behind the buildings or in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible.
 - Provide mechanical ventilation in all residential units proposed along roadways or in areas where noise levels could exceed 65 dBA L_{dn} so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 45 dBA L_{dn} .
 - Install sound-rated windows and construction methods to provide the requisite noise control for residential units proposed along roadways or in areas where noise levels could exceed 70 dBA L_{dn} .

Expose noise-sensitive uses to noise levels in excess of City standards. The Plan would allow the development of new residential uses adjacent to existing commercial and retail uses. In addition, new residential uses may be proposed adjacent to or sometimes within the same building as noise-generating commercial uses. Noise levels resulting from existing and proposed noise-generating uses (i.e., office and retail uses) could expose such noise-sensitive uses to noise levels in excess of the City's or Noise Ordinance limits. This would be a potentially significant impact and mitigation measures have been identified that would reduce this impact to significant but mitigable.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential noise impacts related to exposure of noise-sensitive uses to noise levels in excess of City standards have been eliminated or substantially lessened to a less than significant level by virtue of mitigation measures identified in the PEIR.

Mitigation Measures:

- Noise-6** In areas where new residential development would be located adjacent to commercial uses, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present

appropriate mitigation measures, which may include, but are not limited to the following:

- Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses.
- Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible.
- Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.

UTILITIES AND SERVICE SYSTEMS

Solid Waste. Buildout of the proposed project would incrementally increase solid waste disposal treatment demand in the City. Based on LACSD's operation of the Mesquite Regional Landfill, which is permitted for up to 20,000 tons per day for approximately 100 years, adequate landfill capacity exists to accommodate solid waste disposal needs of the proposed Project. In addition, mitigation measures are identified that would reduce the Project's solid waste impacts. Therefore, the impact on solid waste disposal systems would be considered a significant but mitigable impact.

Finding

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the PEIR.*

Facts in Support of Finding

The potential impacts related to solid waste have been eliminated or substantially lessened to a less than significant level by virtue of the mitigation measure identified in the PEIR.

Mitigation Measures:

- Utilities-3(a)** All construction related to Project implementation shall include verification by the construction contractor that all companies providing waste disposal services recycle all demolition and construction-related wastes. The contract specifying recycled waste service shall be submitted to the City Building Official prior to approval of the certificate of occupancy.
- Utilities-3(b)** In order to facilitate onsite separation and recycling of construction related wastes, all construction contractors shall provide temporary waste separation bins onsite during demolition and construction.

Utilities-3(c) All future developments in the project area shall include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and all other recyclable materials. Materials from these bins shall be collected on a regular basis consistent with the City's refuse disposal program.

Utilities-3(d) All project area residents and commercial tenants shall be provided with educational materials on the proper management and disposal of household hazardous waste, in accordance with educational materials made available by the Los Angeles County Department of Public Works.

VI ENVIRONMENTAL EFFECTS THAT REMAIN SIGNIFICANT AND UNAVOIDABLE AFTER MITIGATION AND FINDINGS

The PEIR for the Long Beach Downtown Plan identifies potentially significant environmental impacts within seven issue areas which cannot be fully mitigated and are therefore considered significant and unavoidable. Those impacts are related to Aesthetics, Air Quality, Cultural Resources, Greenhouse Gas Emissions, Noise, Population and Housing, Public Services, and Transportation and Traffic. The City of Long Beach, having reviewed and considered the information contained in the Final PEIR, Technical Appendices and the administrative record, finds, pursuant to California Public Resources Code 21081 (a)(3) and CEQA Guidelines 15091 (a)(3), that to the extent these impacts remain significant and unavoidable, such impacts are acceptable when weighed against the overriding social, economic, legal, technical, and other considerations set forth in the Statement of Overriding Considerations, included as Section VIII of these Findings. The unavoidably significant impacts identified in the PEIR document are discussed below, along with the appropriate findings per CEQA Guidelines Section 15091. Unavoidably significant impacts have been identified with respect to the following issue areas:

- Aesthetics
- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Population and Housing
- Public Services
- Transportation and Traffic

AESTHETICS

Shade and shadow impacts on surrounding development. Development projects that include high-rise structures as encouraged by the Downtown Plan would cast shadows onto adjacent properties, particularly in the wintertime when shadows extend the farthest from a tall structure and are the most extreme. Because shadows from these development projects would fall on sensitive residential, public gathering, and school uses within the Downtown Plan Project area for more than 3 hours during the winter months, shadow impacts would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set

forth therein. The following mitigation measures would reduce the impacts to the extent feasible.

Mitigation Measures:

- AES-3 Shadow Impacts.** Prior to the issuance of building permits for any structure exceeding 75 feet in height, the applicant shall submit a shading study that includes calculations of the extent of shadowing arches for winter and equinox conditions. If notification is not required per CEQA or the project approval process, owners and tenants of sensitive receptor properties shall be notified of the pending shadowing impacts.

AIR QUALITY

Construction activities would generate emissions of criteria air pollutants. Construction activities associated with development envisioned under the proposed Downtown Plan would generate emissions of criteria air pollutants and ozone precursors. Because of the large size of the Plan area, construction-generated emissions of VOCs and NO_x, both ozone precursors, and PM₁₀ and PM_{2.5} would exceed SCAQMD-recommended thresholds and would substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS. Concurrent construction on multiple sites within the project area is possible at various times during the lifetime of the over the Downtown Plan. Thus, construction-related emissions of criteria air pollutants and precursors could violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, and/or conflict with air quality planning efforts. This would result in a significant adverse impact on air quality. Impacts would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. The following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

- AQ-1(a)** To reduce short-term construction emissions, the City shall require that all construction projects that would require use of heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used during construction shall require

their contractors to implement the Enhanced Exhaust Control Practices (listed below) or whatever mitigation measures are recommended by SCAQMD at the time individual portions of the site undergo construction.

Enhanced Exhaust Control Practices

- The project applicant shall provide a plan for approval by the City, demonstrating that the heavy-duty (50 hp or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_x reduction, 20 percent VOC reduction, and 45 percent particulate reduction compared to the 2011 ARB fleet average, as contained in the URBEMIS output sheets in Appendix C. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. SCAQMD, which is the resource agency for air quality in the Project area, can be used in an advisory role to demonstrate fleet-wide reductions. SCAQMD's mitigation measures for off-road engines can be used to identify an equipment fleet that achieves this reduction (SCAQMD 2007b).
- The project applicant shall submit to the City a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 hp, that would be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the hp rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of heavy-duty off-road equipment, the project representative shall provide the City with the anticipated construction timeline including start date and name and phone number of the project manager and onsite foreman. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed and the dates of each survey. SCAQMD staff and/or other officials may conduct periodic site inspections to determine compliance.
- If, at the time of construction, SCAQMD, CARB, or the EPA has adopted a regulation or new guidance applicable to construction emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so

permits. Such a determination must be supported by a project-level analysis and be approved by the City.

- AQ-1(b)** Prior to construction of each development phase of onsite land uses that are proposed within 1,500 feet of sensitive receptors, each project applicant shall perform a project-level CEQA analysis that includes a detailed LST analysis of construction-generated emissions of NO₂, CO, PM₁₀, and PM_{2.5} to assess the impact at nearby sensitive receptors. The LST analysis shall be performed in accordance with applicable SCAQMD guidance that is in place at the time the analysis is performed. The project-level analysis shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur.

Operational and mobile source emissions would exceed all recommended thresholds. Operational area- and mobile-source emissions from implementation of the proposed Downtown Plan would exceed all applicable SCAQMD-recommended thresholds, and would result in or substantially contribute to emissions concentrations that exceed the NAAQS or CAAQS due to the large size of the plan area. This would result in a significant adverse impact on air quality. Impacts would be *significant and unavoidable*.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. The following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

- AQ-2** Mitigation to reduce mobile source emissions due to implementation of the Plan addresses reducing the number of motor vehicle trips and reducing the emissions of individual vehicles under the control of the project applicant(s). The following measures shall be implemented by project applicant(s) unless it can be demonstrated to the City that the measures would not be feasible.

- The project applicant(s) for all project phases shall require the commercial development operator(s) to operate, maintain, and promote a ride-share program for employees of the various businesses.
- The project applicant(s) for all project phases shall include one or more secure bicycle parking areas within the property and encourage bicycle riding for both employees and customers.
- The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day.
- The City shall ensure that all commercial developments include shower and locker facilities for employees to encourage bicycle, walking, and jogging as options for commuting.
- The project applicant(s) for all project phases shall require that all equipment operated by the businesses within the facility be electric or use non-diesel engines.
- All truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two-dock door. Diesel trucks shall be prohibited from idling more than 5 minutes and must be required to connect to the 110/208-volt power to run any auxiliary equipment. Signs outlining the idling restrictions shall be provided.
- If, at the time of construction, SCAQMD, CARB, or EPA has adopted a regulation or new guidance applicable to mobile- and area-source emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination shall be supported by a project-level analysis that is approved by the City.

Exposure of receptors to short-term and long-term emissions. Implementation of the proposed Downtown Plan would result in exposure of receptors to short- and long-term emissions of TACs from onsite and offsite stationary and mobile sources. Impacts from short-term construction, long-term onsite stationary sources, and offsite mobile-sources would be less than significant. Impacts from Port of Long Beach and offsite stationary sources, particularly nearby industrial areas, and onsite mobile sources would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. The following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

AQ-4(a) The following measures shall be implemented to reduce exposure of sensitive receptors to operational emissions of TACs:

- Proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located away from existing and proposed onsite sensitive receptors such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0.
- Where necessary to reduce exposure of sensitive receptors to an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0, proposed commercial and industrial land uses that would host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off.
- Signs shall be posted in at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by the California Office of Administrative Law in January 2005.
- Proposed facilities that would require the long-term use of diesel equipment and heavy-duty trucks shall develop a plan to reduce emissions, which may include such measures as scheduling activities when the residential uses are the least occupied, requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling.
- When determining the exact type of facility that would occupy the proposed commercial space, the City shall take into consideration its toxic-producing potential.
- Commercial land uses that accommodate more than 100 trucks per day, or 40 trucks equipped with TRUs, within 1,000 feet of sensitive receptors (e.g., residences or schools) shall perform a site-specific project-level HRA in accordance with SCAQMD guidance for projects generating or

attracting vehicular trips, especially heavy-duty diesel-fueled vehicles (SCAQMD 2003b). If the incremental increase in cancer risk determined by the HRA exceeds the threshold of significance recommended by SCAQMD or ARB at the time (if any), then all feasible mitigation measures shall be employed to minimize the impact.

AQ-4(b) The City shall verify that the following measures are implemented by new developments to reduce exposure of sensitive receptors to emissions of TACs from POLB and stationary sources in the vicinity of the Downtown Plan project area:

- All proposed residences in the Downtown Plan Project area shall be equipped with filter systems with high Minimum Efficiency Reporting Value (MERV) for removal of small particles (such as 0.3 micron) at all air intake points to the home. All proposed residences shall be constructed with mechanical ventilation systems that would allow occupants to keep windows and doors closed and allow for the introduction of fresh outside air without the requirement of open windows.
- The heating, ventilation, and air conditioning (HVAC) systems shall be used to maintain all residential units under positive pressure at all times.
- An ongoing education and maintenance plan about the filtration systems associated with HVAC shall be developed and implemented for residences.
- To the extent feasible, sensitive receptors shall be located as far away from the POLB as possible.

AQ-5 The following additional guidelines, which are recommended in ARB's *Land Use Handbook: A Community Health Perspective* (ARB 2005) shall be implemented. The guidelines are considered to be advisory and not regulatory:

- Sensitive receptors, such as residential units and daycare centers, shall not be located in the same building as dry-cleaning operations that use perchloroethylene. Dry-cleaning operations that use perchloroethylene shall not be located within 300 feet of any sensitive receptor. A setback of 500 feet shall be provided for operations with two or more machines.

CULTURAL RESOURCES

Properties for listing on the National or California Register, or as a City Landmark or Landmark District may be impacted. Adoption of the proposed Downtown Plan may result in the removal or alternation of historic structures considered to be eligible for listing on the National Register or the California Register, or that is determined eligible for listing as a City Landmark or Landmark District during redevelopment of properties within the plan area. Compliance with mitigation measures identified herein would provide an opportunity to avoid or reduce impacts to historic properties. However, it may not be feasible to fully implement the

Downtown Plan without impacting historic resources. Therefore, the impact would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. The following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

- CR-1a** The City shall encourage the designation as local landmarks of 14 properties identified in Table 4.3-3 with the "Desired Outcome" of "Pursue Local Designation." The City will encourage the on-going maintenance and appropriate adaptive reuse of all properties in Table 4.3-2 (existing landmarks), and Table 4.3-3 as historic resources.
- CR-1b** The following procedures shall be followed prior to issuance of a demolition permit or a building permit for alteration of any property listed in the Historic Survey Report (ICF Jones & Stokes 2009) by Status Code 3S, 3CS, 5S1, or 5S3; designated as a Historic Landmark (City of Long Beach 2010a); listed in Tables 4.3-2 and 4.3-3 of this PEIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z):

Notification of Historic Preservation Staff

Historic Preservation staff in the City Development Services Department shall be notified upon receipt of any demolition permit or building permit for alteration of any property listed in the Historic Survey Report or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z)

Determination of Need for Historic Property Survey

In consultation with Historic Preservation staff, the City Development Services Department shall determine whether a formal historic property survey is needed and may require that the owner or applicant provide

photographs of the property, including each building façade, with details of windows, siding, eaves, and streetscape views, and copies of the County Assessor and City building records, in order to make this determination.

Determination of Eligibility

If City Development Services Department staff determines that the property may be eligible for designation, the property shall be referred to the Cultural Heritage Commission, whose determination of eligibility shall be considered as part of the environmental determination for the project in accordance with CEQA.

Documentation Program

If the Cultural Heritage Commission determines that the property is eligible for historic listing, the City Development Services Department shall, in lieu of preservation, require that prior to demolition or alteration a Documentation Program be prepared to the satisfaction of the City Development Services Department, which shall include the following:

A. Photo Documentation

Documentation shall include professional quality photographs of the structure prior to demolition with 35 mm black and white photographs, 4" x 6" standard format, taken of all four elevations and with close-ups of select architectural elements, such as but not limited to, roof/wall junctions, window treatments, decorative hardware, any other elements of the building's exterior or interior, or other property features identified by the City Development Services Department to be documented. Photographs shall be of archival quality and easily reproducible.

B. Required drawings

Measured drawings of the building's exterior elevations depicting existing conditions or other relevant features shall be produced from recorded, accurate measurements. If portions of the building are not accessible for measurement or cannot be reproduced from historic sources, they should not be drawn, but clearly labeled as not accessible. Drawings shall be produced in ink on translucent material or archivally stable material (blue-line drawings are acceptable). Standard drawing sizes are 19" x 24" or 24" x 36" and standard scale is 1/4" = 1 foot.

C. Archival Storage

Xerox copies or CD of the photographs and one set of the measured drawings shall be submitted for archival storage with the City Development Services Department; and one set of original photographs, negatives, and measured drawings shall be submitted for archival storage with such other historical repository identified by the City Development Services Department.

GREENHOUSE GAS EMISSIONS

Construction activities would result in increased generation of GHG emissions. Construction activities associated with implementation of the proposed Downtown Plan would result in increased generation of GHG emissions. These emissions would be temporary and short-term and would decline over time as new regulations are developed that address medium- and heavy-duty on-road vehicles and off-road equipment under the mandate of AB 32 and SB 375. Impacts would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

GHG-1(a) Implement Mitigation Measure AQ-1. Implementation of the mitigation measures described in Section 4.2, Air Quality, of the PEIR, which would reduce construction emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The construction mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.

GHG-1(b) Implement Additional Measures to Control Construction-Generated GHG Emissions. To further reduce construction-generated GHG emissions, the project applicant(s) of all public and private developments shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction. Such measures may reduce GHG exhaust emissions from the use of onsite equipment, worker commute trips, and truck trips carrying materials and equipment to and from the project site, as well as GHG emissions embodied in the materials selected for construction (e.g., concrete). Other measures may pertain to the materials used in construction. Prior to the construction of each development phase, the project applicant(s) shall obtain the most current list of GHG-reduction measures that are recommended by the City and/or SCAQMD and stipulate that these measures be implemented during the appropriate construction

phase. The project applicant(s) for any particular development phase may submit to the City a report that substantiates why specific measures are considered infeasible for construction of that particular development phase and/or at that point in time. The report, including the substantiation for not implementing particular GHG-reduction measures, shall be approved by the City.

The City's recommended measures for reducing construction-related GHG emissions at the time of writing this PEIR are listed below and the project applicant(s) shall, at a minimum, be required to implement the following:

- Improve fuel efficiency from construction equipment:
 - reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort),
 - perform equipment maintenance (inspections, detect failures early, corrections),
 - train equipment operators in proper use of equipment,
 - use the proper size of equipment for the job, and
 - use equipment with new technologies (repowered engines, electric drive trains).
- Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power.
- Use an ARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment (emissions of NO_x from the use of low carbon fuel must be reviewed and increases mitigated). Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program (ARB 2010a).
- Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.
- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75 percent by weight).
- Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials).
- Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option.

- Produce concrete onsite if determined to be less emissive than transporting ready mix.
- Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from ARB's Heavy-Duty Vehicle GHG Measure (ARB 2010b) and EPA (EPA 2010).
- Develop a plan to efficiently use water for adequate dust control. This may consist of the use of non-potable water from a local source.

Cumulative generation of GHG emissions. Implementation of the proposed Downtown Plan over the long term would result in increased generation of GHGs, which would contribute considerably to cumulative GHG emissions. Development of compact urban places such as envisioned in the Downtown Plan would reduce GHG emissions per capita over time. Impacts would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

GHG-2(a) Implement Mitigation Measure AQ-2. Implementation of the mitigation measures described in Section 4.2, which would reduce operational emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the project. The operational mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.

GHG-2(b) Implement Additional Measures to Reduce Operational GHG Emissions. For each increment of new development within the Project area requiring a discretionary approval (e.g., tentative subdivision map, conditional use permit, improvement plan), measures that reduce GHG emissions to the extent feasible and to the extent appropriate with respect to the state's progress at the time toward meeting GHG emissions reductions required by

the California Global Warming Solutions Act of 2006 (AB 32) shall be imposed, as follows:

- The project applicant shall incorporate feasible GHG reduction measures that, in combination with existing and future regulatory measures developed under AB 32, will reduce GHG emissions associated with the operation of future project development phases and supporting roadway and infrastructure improvements by an amount sufficient to achieve the goal of 6.6 CO₂e/SP/year, if it is feasible to do so. The feasibility of potential GHG reduction measures shall be evaluated by the City at the time each phase of development is proposed to allow for ongoing innovations in GHG reduction technologies and incentives created in the regulatory environment.
- For each increment of new development, the project applicant shall obtain a list of potentially feasible GHG reduction measures to be considered in the development design from the City. The City's list of potentially feasible GHG reduction measures shall reflect the current state of the regulatory environment, which will continuously evolve under the mandate of AB 32. The project applicant(s) shall then submit to the City a mitigation report that contains an analysis demonstrating which GHG reduction measures are feasible for the associated reduction in GHG emissions, and the resulting CO₂e/SP/year metric. The report shall also demonstrate why measures not selected are considered infeasible. The mitigation report must be reviewed and approved by the City for the project applicant(s) to receive the City's discretionary approval for the applicable increment of development. In determining what measures should appropriately be imposed by a local government under the circumstances, the following factors shall be considered:
 - The extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the Project site are projected to decrease over time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted in the future by ARB or other public agency pursuant to AB 32, or by EPA;
 - The extent to which mobile-source GHG emissions, which at the time of writing this PEIR comprise a substantial portion of the state's GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length;
 - The extent to which GHG emissions emitted by the mix of power generation operated by SCE, the electrical utility that will serve the Project site, are projected to decrease pursuant to the Renewables Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation;

- The extent to which replacement of CCR Title 24 with the California Green Building Standards Code or other similar requirements will result in new buildings being more energy efficient and consequently more GHG efficient;
 - The extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies, and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB's implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions;
 - The extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, effecting cost-benefit analyses that determine economic feasibility; and
 - Whether the total costs of proposed mitigation for GHG emissions, together with other mitigation measures required for the proposed development, are so great that a reasonably prudent property owner would not proceed with the project in the face of such costs.
- In considering how much, and what kind of, mitigation is necessary in light of these factors, the following list of options shall be considered, though the list is not intended to be exhaustive, as GHG-emission reduction strategies and their respective feasibility are likely to evolve over time. These measures are derived from multiple sources including the Mitigation Measure Summary in Appendix B of the California Air Pollution Control Officer's Association (CAPCOA) white paper, *CEQA & Climate Change* (CAPCOA 2008); CAPCOA's *Model Policies for Greenhouse Gases in General Plans* (CAPCOA 2009); and the California Attorney General's Office publication, *The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level* (California Attorney General's Office 2010).

Energy Efficiency

- Include clean alternative energy features to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines).
- Design buildings to meet CEC Tier II requirements (e.g., exceeding the requirements of Title 24 [as of 2007] by 20 percent).
- Site buildings to take advantage of shade and prevailing winds and design landscaping and sun screens to reduce energy use.

- Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings.
- Install light-colored “cool” pavements, and strategically located shade trees along all bicycle and pedestrian routes.

Water Conservation and Efficiency

- With the exception of ornamental shade trees, use water-efficient landscapes with native, drought-resistant species in all public area and commercial landscaping. Use water-efficient turf in parks and other turf-dependant spaces.
- Install the infrastructure to use reclaimed water for landscape irrigation and/or washing cars.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- Design buildings and lots to be water efficient. Only install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces. These restrictions should be included in the Covenants, Conditions, and Restrictions of the community.
- Provide education about water conservation and available programs and incentives.
- To reduce storm water runoff, which typically bogs down wastewater treatment systems and increases their energy consumption, construct driveways to single-family detached residences and parking lots and driveways of multi-family residential uses, with pervious surfaces. Possible designs include Hollywood drives (two concrete strips with vegetation or aggregate in between) and/or the use of porous concrete, porous asphalt, turf blocks, or pervious pavers.

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste at all buildings.
- Provide adequate recycling containers in public areas, including parks, school grounds, golf courses, and pedestrian zones in areas of mixed-use development.

- Provide education and publicity about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Promote ride-sharing programs and employment centers (e.g., by designating a certain percentage of parking spaces for ride-sharing vehicles, designating adequate passenger loading zones and waiting areas for ride-share vehicles, and providing a website or message board for coordinating ride-sharing).
- Provide the necessary facilities and infrastructure in all land use types to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).
- At industrial and commercial land uses, all forklifts, "yard trucks," or vehicles that are predominately used onsite at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption.

NOISE

Construction activities would include vibration sources: Implementation of the proposed Downtown Plan would include construction activities that would include vibrations sources, including pile driving. This would result in a significant adverse impact from vibration at nearby sites. Impacts would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

- Noise-2** The City shall review all construction projects for potential vibration-generating activities from demolition, excavation, pile-driving, and

construction within 100 feet of existing structures and shall require site-specific vibration studies to be conducted to determine the area of impact and to identify appropriate mitigation measures. The studies shall, at a minimum, include the following:

- Identification of the project's vibration compaction activities, pile driving, and other vibration-generating activities that have the potential to generate ground-borne vibration; and the sensitivity of nearby structures to ground-borne vibration. This task should be conducted by a qualified structural engineer.
- A vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; establish a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for actions to be taken when vibration levels approached the defined vibration limits.
- Maintain a monitoring log of vibrations during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for a more or less intensive measurement schedule.
- Vibration levels limits for suspension of construction activities and implementation of contingencies to either lower vibration levels or secure the affected structures.
- Post-construction survey on structures where either monitoring has indicated high vibration levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

POPULATION AND HOUSING

Accommodation of substantial population growth. The proposed Downtown Plan is intended to accommodate substantial population growth in the Downtown Project area. Although the area is presently zoned to permit densities of up to and exceeding 138 dwelling units per acre under the existing PD-30 zone, the impact of this growth would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any

remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

The proposed Downtown Plan would continue a diverse mix of highly urban land uses and would facilitate population and employment growth that has been anticipated by the existing Long Beach General Plan and by the regional population projections developed by SCAG.

Displacement of existing housing. Implementation of the proposed Downtown Plan would occur over a period of 25 years or longer and would result in the displacement of existing housing and people, primarily housed in medium density multi-family dwelling units. New development would occur at higher densities and with more modern housing, frequently as part of a mixed-use development. A number of likely development sites, including surface parking lots and low-rise commercial sites are available within the Downtown Plan project area, and could be developed without displacement of existing residents. While many residents would relocate into different dwelling units either within or outside the project area, they would be displaced from their existing dwelling units and may be unable to obtain similar housing with respect to quality, price, and/or location. Therefore, the project would have an adverse effect on the housing supply and may require construction of replacement housing elsewhere. Impacts would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

Therefore, the proposed Long Beach Downtown Plan would contribute to existing housing deficiencies in the local area, which may cause a need to construct replacement housing elsewhere for the displaced households.

PUBLIC SERVICES

Increased demand for parkland. The proposed project would generate demand for parkland. Although applicants for future residential development projects would be required to pay park and recreation facilities in-lieu fees, it would not be feasible to meet the City standard for parkland acreage of 8 acres per 1,000 residents Citywide, including within the Downtown Plan project area. The project requires the provision of open space with new development based on the size of the proposed project, and offers development incentives for providing additional public open space. Project impacts would, therefore, be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible.

Mitigation Measures:

As a condition of individual project approvals within the Downtown Plan, projects would be required to pay an in-lieu park and recreation facilities impact fee. With collection of required fees, some additional parkland would be developed within the Downtown Plan Project area, but it not expected to be enough to meet the established standard of 8 acres of parkland per 1,000 residents. Therefore, the impact on park and recreation facilities from new development would be significant and unavoidable.

TRANSPORTATION AND TRAFFIC

Traffic and Circulation: The proposed Downtown Plan, in combination with cumulative traffic growth, would result in a significant impact at 16 intersections. Partial mitigation is available for that impact, but physical constraints between existing buildings and on existing rights of way make expansion of the roadway cross-sections difficult. This would result in a significant adverse impact to traffic and transportation. Impacts would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore, the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

Traf-1(a) As the system's capacity is reached, it will become important to manage the street system in a more efficient and coordinated manner. Improvements to the Project area transportation system are proposed as part of the overall Downtown development, including improvements that have been required of other area projects previously approved by the City. Therefore, the mitigation focuses on improvements that would not require significant additional rights-of-way and are achievable within the life of the Plan. There are five proposed mitigation measures for the Downtown Plan, as follows:

1. Implement traffic control system improvements in Downtown on selected arterials.
2. Improve the Alamitos Avenue corridor via removal of selected parking spaces and the implementation of additional travel lanes plus bike lanes in each direction.
3. Reconfigure the 6th Street and 7th Street intersections with Martin Luther King Avenue and Alamitos Avenue for safety and traffic flow enhancements.
4. Enhance freeway access to I-710 to and from Downtown Long Beach.
5. Implement transit facilities and programs to encourage public transit usage and Transportation Demand Management Policies.

Traf-1(b) A series of traffic signal system improvements are recommended in Downtown to accommodate the anticipated growth in travel. The following traffic signal system improvements are recommended as part of this mitigation measure:

1. Implement Adaptive Traffic Signal Control System (ATCS) improvements throughout Downtown consistent with currently planned improvements on Ocean Boulevard and Atlantic Avenue. Streets that are proposed to be included in the ATCS as a mitigation measure for the Downtown Long Beach Strategic Plan include the following:
 - Alamitos Avenue north of Ocean Boulevard
 - Pine Avenue north of Ocean Boulevard

- Pacific Avenue north of Ocean Boulevard
 - 7th Street from I-710 to Alamitos Avenue
 - 6th Street from I-710 to Alamitos Avenue
 - Broadway from I-710 to Alamitos Avenue
 - Ocean Boulevard from Shoreline to Alamitos Avenue (to join the proposed system starting at Alamitos Avenue)
 - Others as needed, to be determined by the City Traffic Engineer and Public Works Director
2. Implement pan/tilt/zoom Closed Circuit Television Camera (CCTV) surveillance and communications with power and control capability to the Department of Public Works to monitor real-time traffic operations from rooftops of selected new buildings as needed and to be determined based on the location of appropriate new high-rise structures along the Alamitos Avenue, Shoreline Drive, and Ocean Boulevard corridors.
 3. Implement transit signal priority for Long Beach Boulevard and upgrade traffic signal system equipment and operations along the Blue Line light rail route.
 4. Upgrade and improve traffic signal equipment throughout Downtown for safety and operational enhancements.

Adaptive traffic control is a versatile mode of traffic operations in that signal timing parameters are dynamically modified in real-time based on prevailing traffic conditions. The proposed ATCS improvements that would be installed in the Project area uses algorithms that perform well in a grid network such as a typical Downtown setting. However, for adaptive operation to function on a grid network, it is essential that the adjacent intersections on the crossing corridors be included in the system.

Traf-1(c) As part of this mitigation measure, a number of intersections would receive major or minor signal modifications, depending on their current status. In addition to the enhancements listed, other potential improvements that can be included are:

- Bicycle improvements (detection, signalization, etc.)
- In-pavement LED crosswalk lights
- Automatic pedestrian detection (i.e., infrared, microwave, or video detection)
- Illuminated push buttons
- Countdown pedestrian signals

- Adaptive pedestrian clearance (increasing the flashing DON'T WALK time based on location of pedestrians in the crosswalk)
- Enhanced signal equipment including mast arms, poles, signal heads, and other necessary enhancements for safety and operations
- Communications enhancements as needed to tie the system together with the Traffic Control Center in City Hall

Traf-1(d) Traffic Calming and Pedestrian Amenities. Appropriate traffic calming and pedestrian amenities shall be provided in conjunction with development projects. Potential improvements include corner curb extensions, enhanced paving of crosswalks, and pedestrian-activated signals at mid-block crossings to make it easier for pedestrians to cross the street and to make them more visible to motorists. Other potential improvements include wider sidewalks in locations where the existing sidewalks are less than 10 feet wide, pedestrian-scale streetlights, and street furniture (City of Long Beach 2005).

Traf-1(e) Currently, due to on-street parking, there is only one lane of travel on Alamitos Avenue in the southbound direction between 3rd Street and Broadway. Parking spaces on the west side of Alamitos Avenue will be removed, the street will be restriped and reconstructed, a bike lane will be added in each direction of travel, and the street will provide for two travel lanes in each direction plus exclusive left turn lanes from 7th Street to Ocean Boulevard. Traffic signal enhancements to implement the Alamitos Avenue improvements shall also be implemented as needed.

Traf-1(f) Developments in the project area will be required to coordinate with area transit providers to accommodate and encourage transit use by residents and patrons. For non-residential sites, appropriate programs and facilities will be included to encourage car and van pooling, provide information on transportation alternatives, and encourage trip reduction strategies in accordance with the City's TDM policies for non-residential development.

Increased demand at Congestion Management Program (CMP) intersections. The intersections of Alamitos Avenue with 7th Street and with Ocean Boulevard are the two project area intersections that are part of the regional CMP arterial monitoring location system. The results of the capacity analysis indicate that the Project will increase demand at both intersections by 2 percent ($V/C > 0.02$) or more. Therefore, the project's CMP impact at these intersections would be significant and unavoidable.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing as discussed in the Statement of Overriding Considerations, outweigh the unavoidable adverse environmental effects; therefore the adverse environmental effects are considered acceptable.*

Facts in Support of Finding

The overriding social, economic and other considerations set forth in the Statement of Overriding Considerations provide additional facts in support of these findings. Any remaining, unavoidable significant effects are acceptable when balanced against the facts set forth therein. In addition, the following mitigation measures would reduce the impacts to the extent feasible:

Mitigation Measures:

Alamitos Avenue/7th Street. With implementation of the proposed ATCS retrofit along Alamitos Avenue, this intersection is anticipated to operate at LOS E during the AM and PM peak hours. To mitigate the project impact at this location, the following additional improvements would be required:

- Addition of eastbound through lane
- Addition of two westbound through lanes and right-turn and left-turn lanes

Implementation of these improvements would require right-of-way acquisition, signal modification, sidewalk realignment, removal of parking, and addition of another receiving lane in the eastbound direction. These improvements would improve intersection operations to LOS D during the AM and PM peak hours.

Avenue/Shoreline Avenue/Ocean Boulevard. With implementation of the proposed ATCS retrofit along Alamitos Avenue, this intersection is anticipated to operate at LOS F during the AM and PM peak hours. To mitigate the project impact at this location, the following additional improvements would be required:

- Addition of westbound through lane
- Overlap the northbound right-turn phase with the westbound left-turn phase.

Implementation of these improvements would require right-of-way acquisition, signal modification, sidewalk realignment, and removal of parking. These improvements would improve intersection operations to LOS E during the AM and PM peak hours.

Due to right-of-way constraints and the location of existing structures that would need to be removed to provide additional travel lanes, it is not considered to be feasible to add physical capacity via widening due to significant secondary impacts at these two intersections. Furthermore, due to significant pedestrian and bicycle activity in this area, modification of the intersections could increase accident occurrence and other safety concerns to pedestrians, bicyclists, and motorists. Therefore, the impact at the CMP intersections remains *significant and unavoidable*.

VII ALTERNATIVES TO THE PROPOSED PROJECT

The PEIR, in Section V, Alternatives (incorporated by reference), discusses the environmental effects of alternatives to the proposed project. A description of these alternatives, a comparison of their environmental impacts to the proposed project, and the City's findings are listed below. These alternatives are compared against the project relative to the identified project impacts, summarized in sections V and VI, above, and to the project objectives, as stated in Section II, Project Description, of the PEIR. In making the following alternatives findings, the City of Long Beach certifies that it has independently reviewed and considered the information on alternatives provided in the PEIR, including the information provided in the comments on the Draft PEIR and the responses thereto.

A NO PROJECT/EXISTING ZONING ALTERNATIVE

This alternative assumes that Long Beach Downtown Plan would not be implemented. The land use intensity of development under the No Project/Existing Zoning Alternative would not be expected to be substantially different than the proposed Project. Household projections provided by SCAG estimate that the Downtown Plan project area would see an increase of approximately 4,230 households without considering any change in land use controls. The residential impact analysis considered in this PEIR is based on 5,000 new dwelling units. Commercial development, including offices, retail businesses, restaurants, and hotels, would be determined more by local, national, and international economic conditions, which would not be expected to be influenced by the relatively minor proposed change in land use regulations in the Downtown project area.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing and public facilities and for revitalization as discussed in the Statement of Overriding Considerations, render this alternative infeasible.*

Facts in Support of Finding

This alternative would not meet most of the basic objectives of the proposed project, including:

- Promote the development of a distinctive downtown skyline and a vibrant, compact City core attracting cosmopolitan and creative people.
- Position downtown as the lively heart of the City, connecting with neighborhoods and the coastline.
- Develop in a way that is less dependent on fossil fuels and more focused on walking, bicycling, and public transportation.
- Support new industries to continue to diversify the economy and promote job growth while strengthening the existing backbone of convention, tourism, and port businesses.
- Encourage bold architecture, planning, and construction utilizing green building technology and incorporating sustainable energy.
- Demand quality in building practices in order to ultimately create historical masterpieces.

- Value buildings of historic merit and seek to preserve or restore them through adaptive reuse.
- Include the best aspects of an innovative global City: dynamic architecture, strong public spaces and open space, celebration of this unique culture, and respect for the natural environment.

Implementation of the No Project alternative would not preclude future development on the site and/or renovations or expansions of existing structures or uses, including those that would be exempt from CEQA and/or the City's discretionary review.

The impact analysis of the No Project/Existing Zoning Alternative is not expected to substantially differ from the proposed Project with respect ADT or other impacts related to the permitted intensity of residential and commercial development.

The findings for the proposed project set forth in this document and the overriding social, economic and other considerations set forth in the Statement of Overriding Considerations support elimination of this alternative from further consideration.

B LOWER PROFILE/LESS INTENSITY ALTERNATIVE

This alternative would reduce building heights and density so as to potentially reduce total Project trips by 30 percent. The lower profile of new development would be achieved by reducing the size of the Height Incentive Area by approximately 30 percent and by reducing the 150-foot Height Area to a maximum height of 120 feet. The reduced intensity would be achieved by reducing the maximum floor area ratio (FAR) to 4.5 in the reduced 120-foot Height Area and to 6.0 FAR in the Height Incentive Area, with the potential for an additional 3.0 FAR through the development incentives. This alternative assumes that residential units would be reduced from 5,000 dwelling units under the proposed project to 3,500 dwelling units; office space would be reduced from 1,500,000 square feet under the proposed Project to 1,050,000 square feet; retail space would be reduced from 384,000 square feet under the proposed Project to 270,000 square feet; and restaurant space would be reduced from 96,000 square feet under the proposed Project to 68,000 square feet. Hotel uses would remain at 800 rooms per the proposed Project. This is projected to result in a reduction of approximately 29,000 ADT in comparison to the proposed project.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing and public facilities and for revitalization as discussed in the Statement of Overriding Considerations, render this alternative infeasible.*

Facts in Support of Finding

This alternative would meet many of the objectives of the proposed project and would incrementally reduce the level of environmental impact with respect to some issues as compared to the proposed project. However, air quality, cultural resources, greenhouse gas

emissions, noise, public services, and transportation and traffic impacts would remain significant under this alternative.

If the Lower Profile/Less Intensity Alternative were to be adopted, buildout of the Downtown Plan project area would result in a reduced density and intensity of development than would the proposed Project. The estimated increase of 91,439 ADT under the proposed project could be reduced by approximately 29,000 ADT under this alternative and would result in reduced impacts to air quality and noise. Aesthetic impacts could also be reduced by lower profile buildings.

However, if the supply of housing and commercial space in Downtown does not meet the market demand, additional building sites could be needed within or near Downtown and the long term impact from increased traffic and associated air quality and noise impacts could still occur. Impacts to historic buildings could also occur under this alternative and demolition for additional building sites could potentially encounter more asbestos and lead-based paints.

Therefore, the findings for this alternative set forth in this document and the overriding social, economic and other considerations set forth in the Statement of Overriding Considerations support elimination of this alternative from further consideration.

C REDUCED NONRESIDENTIAL LAND USE ALTERNATIVE

This alternative would retain the proposed 5,000 dwelling units per the proposed Project and would reduce the nonresidential uses as follows: office space would be reduced to 1,050,000 square feet; retail space would be reduced to 270,000 square feet; and restaurant space would be reduced to 68,000 square feet. Hotel uses would also be reduced by 30 percent, from 800 rooms with the proposed project to 540 rooms with this alternative. This reduction in non-residential land uses is projected to reduce traffic by approximately 25,500 ADT in comparison to the proposed project.

Finding

- *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of housing and public facilities and for revitalization as discussed in the Statement of Overriding Considerations, render this alternative infeasible.*

Facts in Support of Finding

This alternative would meet many of the objectives of the proposed project and would incrementally reduce the level of environmental impact with respect to some issues as compared to the proposed project. However, air quality, cultural resources, greenhouse gas emissions, noise, public services, and transportation and traffic impacts would remain significant under this alternative.

If the Reduced Non-residential Land Use Alternative were to be adopted, buildout of the Downtown Plan area would result in the same residential density and population as the proposed Project. The reduction in commercial floor area could reduce the proposed Project's

impact to housing displacement. The estimated increase of 91,439 ADT under the proposed Project could be reduced by approximately 25,500 ADT under this alternative. Potential project impacts to air quality and noise could be reduced; however, if the supply of housing and commercial space in Downtown does not meet the market demand, additional building sites could be needed within or near Downtown and the long term impact from increased traffic and associated air quality and noise impacts could still occur.

Impacts to historic buildings could also occur under this alternative and demolition for additional building site could potentially encounter more asbestos and lead-based paints if the demand for commercial space is not accommodated by the proposed Project. All potentially significant Project impacts to geology and seismicity, hydrology and water quality, to increased population, and to solid waste disposal would be similar to the proposed Project. The reduced intensity of development in the Downtown Plan project area could result in reduced impact to the proposed Project's significant environmental effects; however, if an adequate supply of developable land is not provided in the Downtown Plan project area, increased impacts could occur from additional growth to meet market demand in or adjacent to the project area.

Based on the above, the findings for this alternative set forth in this document and the overriding social, economic and other considerations set forth in the Statement of Overriding Considerations support elimination of this alternative from further consideration.

VIII STATEMENT OF OVERRIDING CONSIDERATIONS

A INTRODUCTION

The California Environmental Quality Act (CEQA) and the CEQA Guidelines provide in part the following:

- CEQA requires that the decision maker balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of the proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."
- Where the decision of the public agency allows the occurrence of significant effects that are identified in the Program Environmental Impact Report (PEIR) but are not avoided or substantially lessened, the agency must state in writing the reasons to support its action based on the PEIR and/or other information in the record. This statement may be necessary if the agency also makes the finding under Section 15091 (a)(2) or (a)(3) of the *CEQA Guidelines*.
- If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the Notice of Determination (Section 15093 of the *CEQA Guidelines*).

The City of Long Beach, having reviewed and considered the information contained in the Program Environmental Impact Report (PEIR) for the Long Beach Downtown Plan (the project), Responses to Comments and the public record, adopts the following Statement of Overriding Considerations that have been balanced against the unavoidable adverse impacts in reaching a decision on the project.

B SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Although mitigation measures have been included where feasible for potential project impacts as described in the preceding findings, identified measures cannot bring project impacts to below a level of significance for the following project impacts:

- Aesthetics
- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Noise
- Population and Housing
- Public Services
- Traffic and Circulation

Details of these significant unavoidable adverse impacts are discussed in the Long Beach Downtown Plan PEIR and are summarized in Section VII, Other Environmental Considerations, and in the Statement of Facts and Findings.

C STATEMENT OF OVERRIDING CONSIDERATIONS

The City of Long Beach must adopt discretionary actions to approve the Long Beach Downtown Plan. Analysis in the PEIR for this project has concluded that the proposed project would result in impacts to aesthetics, air quality, cultural resources, greenhouse gas emissions, noise, population and housing, public services, and traffic and circulation that cannot be mitigated to a less than significant level. All other potential significant adverse project impacts can be mitigated to a less than significant level through mitigation measures in the Final EIR.

The California Environmental Quality Act requires the lead agency to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project.

The City of Long Beach has determined that the significant unavoidable adverse project impacts, which would remain significant after mitigation, are acceptable and are outweighed by social, economic and other benefits.

1. The City of Long Beach finds that all feasible mitigation measures have been imposed to lessen impacts from adopting the Downtown Plan, or from likely future development of projects consistent with the Downtown Plan, to less than significant levels. Furthermore, while two project alternatives (Lower Profile/Less Intensity Alternative B and Reduced Nonresidential Land Use Alternative C) may incrementally reduce environmental impacts, neither provides all of the benefits of the proposed Project and both are otherwise socially or economically infeasible, as described in the Statement of Facts and Findings.
2. Implementation of the proposed project will contribute to long-range development goals identified by the City in the General Plan Land Use Element, and the 2010 Long Beach Strategic Plan. The Land Use Element adopted in July 1989 calls for Downtown Long Beach to "build its downtown into a multi-purpose activity center of regional significance...offering a wide variety of activities which result in an overall environment that is attractive and exciting during both the daylight and evening hours", "support efforts aimed at preserving its significant historic and cultural places and buildings", and achieving "architectural continuity with the downtown...through the quality of design, workmanship, and materials utilized" Long Beach accepts the population growth anticipated in the downtown and supports the development of more park/recreation open space, new quality residential units, added commercial/retail goods and services, and additional space for educational facilities required to support a growing downtown population." (LUE pages 205b and 205c). The 2010 Strategic Plan states that "[i]n order to improve neighborhood stability, we need to find locations for high density housing, where transportation and other public and private services can support it." The Downtown Plan furthers these goals by providing multiple-family

housing, additional retail, restaurant, hotel and office development, with enhanced streetscapes and expanded public open space to create a vibrant urban core.

3. The proposed project will positively enhance Long Beach by facilitating redevelopment of the Downtown area with a mix of residential, commercial, and public uses in proximity to existing and planned employment, entertainment, retail, and transit opportunities.
4. The proposed project will enhance access to the project area by providing a high quality pedestrian environment, efficient vehicular access, parking structures, bicycle-supporting facilities, and access to mass transit.
5. The new residential units facilitated by the proposed Downtown Plan will increase the availability of housing in the City of Long Beach, helping meet the City's housing goals, enhancing the jobs/housing balance, and encouraging walking, biking, and transit use.
6. The proposed project will enhance opportunities for private financial investments through home ownership opportunities, employment and business opportunities and retail opportunities.
7. The proposed project will strive for sustainability and utilize strategies to encourage efficient use of land and energy conservation. This will further the City's sustainability goals and reduce air pollution in the City.
8. The proposed project will enhance the economic vitality of the project area and the City as a whole by facilitating economically viable residential and non-residential development that will provide property tax, sales tax, and other revenue opportunities.

Therefore, the City of Long Beach, having reviewed and considered the information contained in the Final PEIR, Technical Appendices and the public record, adopts the Statement of Overriding Considerations that has been balanced against the unavoidable adverse impacts in reaching a decision on this project.

CITY OF LONG BEACH DOWNTOWN PLAN

MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires adoption of a monitoring and reporting program for the mitigation measures necessary to mitigate or avoid significant effects on the environment. The mitigation monitoring and reporting program is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Final Environmental Impact Report (EIR) that applies to the applicant's proposal, specifications are made herein that identify the action required and the monitoring that must occur. In addition, the party for verifying compliance with individual mitigation measures is identified.

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
AESTHETICS						
<p>Mitigation Measure AES-2(a) Lighting Plans and Specifications. Prior to the issuance of building permits for new large development projects, the applicant shall submit lighting plans and specifications for all exterior lighting fixtures and light standards to the Development Services Department for review and approval. The plans shall include a photometric design study demonstrating that all outdoor light fixtures to be installed are designed or located in a manner as to contain the direct rays from the lights onsite and to minimize spillover of light onto surrounding properties or roadways. All parking structure lighting shall be shielded and directed away from residential uses. Rooftop decks and other similar amenities are encouraged in the Plan. Lighting for such features shall be designed so that light is directed so as to provide adequate security and minimal spill-over or nuisance lighting.</p>	<p>Review and approval of final building plans for individual development projects.</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		
<p>Mitigation Measure AES-2(b) Building Material Specifications. Prior to the issuance of any building permits for development projects, applicants shall submit plans and specifications for all building materials to the Development Services Department for review and approval. The Plan provides measures to ensure that the highest quality materials are used for new development projects. This is an important consideration, since high-quality materials last longer. Quality development provides an impression of permanence and can encourage additional private investment in Downtown Long Beach.</p>	<p>Review and approval of final building plans for individual development projects</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		

Key: PWD – City of Long Beach Public Works Department
 LBDS – City of Long Beach Development Services Department
 OCM – Onsite Construction Manager

City of Long Beach
 SCH No. 2009071006

MMRP-2

Long Beach Downtown Plan

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<p>Mitigation Measure AES-2(c) Light Fixture Shielding. Prior to the issuance of building permits for development projects within the Downtown Plan Project area, applicants shall demonstrate to the Development Services Department that all night lighting installed on private property within the project site shall be shielded, directed away from residential and other light-sensitive uses, and confined to the project site. Rooftop lighting, including rooftop decks, security lighting, or aviation warning lights, shall be in accordance with Airport/Federal Aviation Administration (FAA) requirements. Additionally, all lighting shall comply with all applicable Airport Land Use Plan (ALUP) Safety Policies and FAA regulations.</p> <p>Mitigation Measure AES-2(d) Window Tinting. Prior to the issuance of any building permits, the applicant shall submit plans and specifications showing that building windows are manufactured or tinted to minimize glare from interior lighting and to minimize heat gain in accordance with energy conservation measures.</p> <p>Mitigation Measure AES-3 Shadow Impacts. Prior to the issuance of building permits for any structure exceeding 75 feet in height, the applicant shall submit a shading study that includes calculations of the extent of shadowing arches for winter and equinox conditions. If notification is not required per CEQA or the project approval process, owners and tenants of sensitive receptor properties shall be notified of the pending shadowing impacts.</p>	<p>Review and approval of final building plans for individual development projects</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		
<p>AIR QUALITY</p> <p>Mitigation Measure AQ-1(a) To reduce short-term construction emissions, the City shall require that all construction projects that would require use of heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used during construction shall require their contractors to implement the Enhanced Exhaust Control Practices (listed below) or whatever mitigation measures are recommended by SCAQMD at the time individual portions of the site undergo construction.</p>	<p>Field verification of compliance for individual development projects</p>	<p>During construction</p>	<p>Periodically throughout construction of individual development projects</p>	<p>OCM</p>		

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<p><u>Enhanced Exhaust Control Practices</u></p> <ul style="list-style-type: none"> The project applicant shall provide a plan for approval by the City, demonstrating that the heavy-duty (50 hp or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_x reduction, 20 percent VOC reduction, and 45 percent particulate reduction compared to the 2011 ARB fleet average, as contained in the URBEMIS output sheets in Appendix C. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. SCAQMD, which is the resource agency for air quality in the Project area, can be used in an advisory role to demonstrate fleet-wide reductions. SCAQMD's mitigation measures for off-road engines can be used to identify an equipment fleet that achieves this reduction (SCAQMD 2007b). The project applicant shall submit to the City a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 hp, that would be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the hp rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of heavy-duty off-road equipment, the project representative shall provide the City with the anticipated construction timeline including start date and name and phone number of the project manager and onsite foreman. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be 						

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<p>submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed and the dates of each survey. SCAQMD staff and/or other officials may conduct periodic site inspections to determine compliance.</p> <ul style="list-style-type: none"> If, at the time of construction, SCAQMD, CARB, or the EPA has adopted a regulation or new guidance applicable to construction emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination must be supported by a project-level analysis and be approved by the City. 						
<p>Mitigation Measure AQ-1(b) Prior to construction of each development phase of onsite land uses that are proposed within 1,500 feet of sensitive receptors, each project applicant shall perform a project-level CEQA analysis that includes a detailed LST analysis of construction-generated emissions of NO₂, CO, PM₁₀, and PM_{2.5} to assess the impact at nearby sensitive receptors. The LST analysis shall be performed in accordance with applicable SCAQMD guidance that is in place at the time the analysis is performed. The project-level analysis shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur.</p>	<p>Review and approval of LST analysis for individual development projects</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>OCM</p>		
<p>Mitigation Measure AQ-2 Mitigation to reduce mobile source emissions due to implementation of the Plan addresses reducing the number of motor vehicle trips and reducing the emissions of individual vehicles under the control of the project applicant(s). The following measures shall be implemented by project applicant(s) unless it can be demonstrated to the City that the measures would not</p>	<p>Review and approval of final building plans for individual development projects</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>OCM, LBDS</p>		

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<p>be feasible.</p> <ul style="list-style-type: none"> The project applicant(s) for all project phases shall require the commercial development operator(s) to operate, maintain, and promote a ride-share program for employees of the various businesses. The project applicant(s) for all project phases shall include one or more secure bicycle parking areas within the property and encourage bicycle riding for both employees and customers. The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day. The City shall ensure that all new commercial developments include or have access to convenient shower and locker facilities for employees to encourage bicycle, walking, and jogging as options for commuting. The project applicant(s) for all project phases shall require that all equipment operated by the businesses within the facility be electric or use non-diesel engines. All truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two-dock door. Diesel trucks shall be prohibited from idling more than 5 minutes and must be required to connect to the 110/208-volt power to run any auxiliary equipment. Signs outlining the idling restrictions shall be provided. If, at the time of construction, SCAQMD, CARB, or EPA has adopted a regulation or new guidance applicable to mobile- and area-source emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination shall be supported by a project-level analysis that is approved by the City. 	Review and approval	Prior to issuance	Once per	OCM, LBDS		

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
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<p>shall be implemented to reduce exposure of sensitive receptors to operational emissions of TACs:</p> <ul style="list-style-type: none"> Proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located away from existing and proposed onsite sensitive receptors such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0. Where necessary to reduce exposure of sensitive receptors to an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0, proposed commercial and industrial land uses that would host diesel trucks shall incorporate idling reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. Signs shall be posted in at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by the California Office of Administrative Law in January 2005. Proposed facilities that would require the long-term use of diesel equipment and heavy-duty trucks shall develop a plan to reduce emissions, which may include such measures as scheduling activities when the residential uses are the least occupied, requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling. When determining the exact type of facility that would occupy the proposed commercial space, the City shall take into consideration its toxic-producing potential. 	<p>of applicant-prepared health risk studies and, as necessary, plans to reduce hazards to below specified risk levels</p>	<p>of building permits</p>	<p>individual development project involving potential TAC hazards</p>			

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MMRP-7

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
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<ul style="list-style-type: none"> Commercial land uses that accommodate more than 100 trucks per day, or 40 trucks equipped with TRUs, within 1,000 feet of sensitive receptors (e.g., residences or schools) shall perform a site-specific project-level HRA in accordance with SCAQMD guidance for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles (SCAQMD 2003b). If the incremental increase in cancer risk determined by the HRA exceeds the threshold of significance recommended by SCAQMD or ARB at the time (if any), then all feasible mitigation measures shall be employed to minimize the impact. 						
<p>Mitigation Measure AQ-4(b) The City shall verify that the following measures are implemented by new developments to reduce exposure of sensitive receptors to emissions of TACs from POLB and stationary sources in the vicinity of the Downtown Plan Project area:</p> <ul style="list-style-type: none"> All proposed residences in the Downtown Plan Project area shall be equipped with filter systems with high Minimum Efficiency Reporting Value (MERV) for removal of small particles (such as 0.3 micron) at all air intake points to the home. All proposed residences shall be constructed with mechanical ventilation systems that would allow occupants to keep windows and doors closed and allow for the introduction of fresh outside air without the requirement of open windows. The heating, ventilation, and air conditioning (HVAC) systems shall be used to maintain all residential units under positive pressure at all times. An ongoing education and maintenance plan about the filtration systems associated with HVAC shall be developed and implemented for residences. To the extent feasible, sensitive receptors shall be located as far away from the POLB as possible. 	Review and approval of applicant-prepared health risk studies and, as necessary, plans to reduce hazards to below specified risk levels	Prior to issuance of building permits	Once per individual development project involving potential health risks	OCM, LBDS		
<p>Mitigation Measure AQ-5 The following additional guidelines, which are recommended in ARB's <i>Land Use Handbook: A Community Health Perspective</i> (ARB 2005)</p>	Review of individual development projects for consistency with	Prior to issuance of building permits	Once per individual development	OCM, LBDS		

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
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<p>shall be implemented. The guidelines are considered to be advisory and not regulatory.</p> <p>Sensitive receptors, such as residential units and daycare centers, shall not be located in the same building as dry-cleaning operations that use perchloroethylene. Dry-cleaning operations that use perchloroethylene shall not be located within 300 feet of any sensitive receptor. A setback of 500 feet shall be provided for operations with two or more machines.</p>	ARB guidelines		project			
<p>Mitigation Measure AQ-6 The following mitigation measures shall be implemented to control exposure of sensitive receptors to operational odorous emissions. The City shall ensure that all project applicant(s) implement the following measures:</p> <ul style="list-style-type: none"> The City shall consider the odor-producing potential of land uses when reviewing future development proposals and when the exact type of facility that would occupy areas zoned for commercial, industrial, or mixed-use land uses is determined. Facilities that have the potential to emit objectionable odors shall be located as far away as feasible from existing and proposed sensitive receptors. Before the approval of building permits, odor-control devices shall be identified to mitigate the exposure of receptors to objectionable odors if a potential odor-producing source is to occupy an area zoned for commercial land use. The identified odor-control devices shall be installed before the issuance of certificates of occupancy for the potentially odor-producing use. The odor-producing potential of a source and control devices shall be determined in coordination with SCAQMD and based on the number of complaints associated with existing sources of the same nature. Truck loading docks and delivery areas shall be located as far away as feasible from existing and proposed sensitive receptors. 	<p>Review and approval of final building plans and applicant-proposed odor control methods for individual development projects</p>	Prior to issuance of building permits	Once per individual development project involving potential odor issues	OCM, LBDS		

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MMRP-9

Long Beach Downtown Plan

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<ul style="list-style-type: none"> Signs shall be posted at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by California's Office of Administrative Law in January 2005. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) Proposed commercial and industrial land uses that have the potential to host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) <p>In addition, mitigation measures identified under AQ-4(b) to reduce indoor exposure to TACs would also result in a reduction in the intensity of offensive odors from the surrounding odor sources.</p>						
CULTURAL RESOURCES						
<p>Mitigation Measure CR-1(a) The City shall encourage the designation as local landmarks of 21 properties identified in Table 4.3-3 with the "Desired Outcome" of "Pursue Local Designation." The City will encourage the on-going maintenance and appropriate adaptive reuse of all properties in Table 4.3-2 (existing landmarks), and Table 4.3-3 as historic resources.</p>	<p>Review and approval of final building plans involving potential historic resources</p>	<p>Prior to issuance of demolition permits</p>	<p>Once per individual development project with the potential to adversely affect historic resources</p>	<p>LBDS</p>		
<p>Mitigation Measure CR-1(b) The following procedures shall be followed prior to issuance of a demolition permit or a building permit for alteration of any property listed in the Historic Survey Report (ICF Jones & Stokes 2009) by Status Code 3S, 3CS, 5S1, or 5S3; designated as a</p>	<p>Verification that specified procedures have been followed for individual development projects involving</p>	<p>Prior to issuance of demolition permits</p>	<p>Once per individual development project with the potential to</p>	<p>PWD, LBDS</p>		

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<p>Historic Landmark (City of Long Beach 2010a); listed in Tables 4.3-2 and 4.3-3 of this PEIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z):</p> <p><u>Notification of Historic Preservation Staff</u></p> <p>Historic Preservation staff in the City Development Services Department shall be notified upon receipt of any demolition permit or building permit for alteration of any property listed in the Historic Survey Report or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z)</p> <p><u>Determination of Need for Historic Property Survey</u></p> <p>In consultation with Historic Preservation staff, the City Development Services Department shall determine whether a formal historic property survey is needed and may require that the owner or applicant provide photographs of the property, including each building façade, with details of windows, siding, eaves, and streetscape views, and copies of the County Assessor and City building records, in order to make this determination.</p> <p><u>Determination of Eligibility</u></p> <p>If City Development Services Department staff determines that the property may be eligible for designation, the property shall be referred to the Cultural Heritage Commission, whose determination of eligibility shall be considered as part of the environmental determination for the project in accordance with CEQA.</p> <p><u>Documentation Program</u></p> <p>If the Cultural Heritage Commission determines that the property is eligible for historic listing, the City Development Services Department shall, in lieu of preservation, require that prior to demolition or alteration a Documentation</p>	<p>historic properties and that appropriate mitigation has been undertaken</p>		<p>adversely affect historic resources</p>			

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<p>Program be prepared to the satisfaction of the City Development Services Department, which shall include the following:</p> <p>A. Photo Documentation Documentation shall include professional quality photographs of the structure prior to demolition with 35 mm black and white photographs, 4" x 6" standard format, taken of all four elevations and with close-ups of select architectural elements, such as but not limited to, roof/wall junctions, window treatments, decorative hardware, any other elements of the building's exterior or interior, or other property features identified by the City Development Services Department to be documented. Photographs shall be of archival quality and easily reproducible.</p> <p>B. Required Drawings Measured drawings of the building's exterior elevations depicting existing conditions or other relevant features shall be produced from recorded, accurate measurements. If portions of the building are not accessible for measurement or cannot be reproduced from historic sources, they should not be drawn, but clearly labeled as not accessible. Drawings shall be produced in ink on translucent material or archivally stable material (blue-line drawings are acceptable). Standard drawing sizes are 19" x 24" or 24" x 36" and standard scale is 1/4" = 1 foot.</p> <p>C. Archival Storage Xerox copies or CD of the photographs and one set of the measured drawings shall be submitted for archival storage with the City Development Services Department; and one set of original photographs, negatives, and measured drawings shall be submitted for archival storage with such other historical repository identified by the City Development Services Department.</p>						

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
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<p>Mitigation Measure CR-2(a) A qualified project archaeologist or archaeological monitor approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of cultural resources. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities to allow the find to be evaluated. If the archaeological monitor determines the find to be significant, the project applicant and the City shall be notified and an appropriate treatment plan for the resources shall be prepared. The treatment plan shall include notification of a Native American representative and shall consider whether the resource should be preserved in place or removed to an appropriate repository as identified by the City.</p> <p>Mitigation Measure CR-2(b) The project archaeologist shall prepare a final report of the find for review and approval by the City and shall include a description of the resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historic Resources and the National Register of Historic Places. The report shall be filed with the California Historic Resources Information System South Central Coastal Information Center. If the resources are found to be significant, a separate report including the results of the recovery and evaluation process shall be prepared.</p> <p>Mitigation Measure CR-2(c) If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendant, who will help determine what</p>	<p>Verification that a qualified monitor has been retained for individual development projects involving excavation in native sediments; field verification of monitoring</p>	<p>Verification that a monitor has been retained prior to issuance of demolition permit; field verification during construction</p>	<p>Once for verification that a monitor has been retained; periodically throughout construction for field verification</p>	<p>LBDS, OCM</p>		
<p>Mitigation Measure CR-2(c) If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendant, who will help determine what</p>	<p>Review and approval of report (if required)</p>	<p>Prior to re-initiating work (if resources unearthed)</p>	<p>As needed throughout construction</p>	<p>LBDS, OCM</p>		
<p>Mitigation Measure CR-2(c) If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendant, who will help determine what</p>	<p>Verification that County Coroner and/or NAHC consultation has occurred (if human remains unearthed)</p>	<p>Prior to re-initiating work (if human remains unearthed)</p>	<p>As needed throughout construction</p>	<p>LBDS, OCM</p>		

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<p>course of action should be taken in dealing with the remains. Preservation in place and project design alternatives shall be considered as possible courses of action by the project applicant, the City, and the Most Likely Descendent.</p> <p>Mitigation Measure CR-3(a) A qualified paleontologist approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of paleontological resources. Monitoring shall consist of visually inspecting fresh exposures of rock for fossil remains and, where appropriate, collection of sediment samples for further analysis. The frequency of inspections shall be based on the rate of excavation and grading activities, the materials being excavated, the depth of excavation, and, if found, the abundance and type of fossils encountered.</p> <p>Mitigation Measure CR-3(b) If a potential fossil is found, the paleontologist shall be allowed to temporarily divert or redirect excavation and grading in the area of the exposed fossil to evaluate and, if necessary, salvage the find. All fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County and shall be accompanied by a report on the fossils collected and their significance, and notes, maps, and photographs of the salvage effort.</p>	<p>Verification that a qualified paleontologist has been retained for individual development projects involving excavation of native sediments; field verification of monitoring</p> <p>Verification that any paleontological resources identified during grading and construction of individual development projects have been appropriately salvaged</p>	<p>Verification that a monitor has been retained prior to issuance of demolition permit; field verification during construction</p> <p>Prior to re-initiating work (if fossils unearthed)</p>	<p>Once for verification that a monitor has been retained; periodically throughout construction for field verification</p> <p>As necessary throughout construction of individual development projects</p>	<p>LBDS, OCM</p> <p>LBDS, OCM</p>		
<p>GEOLOGY AND SEISMICITY</p> <p>Mitigation Measure Geo-1 New construction or structural remodeling of buildings proposed within the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite</p>	<p>Review and approval of final building plans for individual development projects</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, OCM</p>		

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<p>structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.</p> <p>Mitigation Measure Geo-2 Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.</p> <p>Mitigation Measure Geo-3 Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. For areas where the expansion index is found to be greater than 20, grading and foundation designs shall be engineered to withstand the existing conditions. The expansion testing may be omitted if the grading and foundations are engineered to withstand the presence of highly expansive soils.</p>	<p>Review and approval of geotechnical investigations for individual development projects and verification that appropriate standards have been incorporated into final building plans</p>	<p>Geotechnical investigation and final building plan review prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, OCM</p>		
<p>GREENHOUSE GAS EMISSIONS</p> <p>Mitigation Measure GHG-1(a) Implement Mitigation</p>	<p>Review and approval of final building plans for individual development projects</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>LBDS</p>		

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<p><u>Measure AQ-1.</u> Implementation of the mitigation measures described in Section 4.2, Air Quality, of this PEIR, which would reduce construction emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The construction mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.</p>	<p>of final building plans to verify compliance with applicable measures</p>	<p>of building permits</p>	<p>individual development project</p>			
<p><u>Mitigation Measure GHG-1(b) Implement Additional Measures to Control Construction-Generated GHG Emissions.</u> To further reduce construction-generated GHG emissions, the project applicant(s) of all public and private developments shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction. Such measures may reduce GHG exhaust emissions from the use of onsite equipment, worker commute trips, and truck trips carrying materials and equipment to and from the project site, as well as GHG emissions embodied in the materials selected for construction (e.g., concrete). Other measures may pertain to the materials used in construction. Prior to the construction of each development phase, the project applicant(s) shall obtain the most current list of GHG-reduction measures that are recommended by the City and/or SCAQMD and stipulate that these measures be implemented during the appropriate construction phase. The project applicant(s) for any particular development phase may submit to the City a report that substantiates why specific measures are considered infeasible for construction of that particular development phase and/or at that point in time. The report, including the substantiation for not implementing particular GHG-reduction measures, shall be approved by the City.</p>	<p>Verification that construction specifications include City and SCAQMD recommended measures; field verification of compliance</p>	<p>Construction specification review and approval prior to issuance of grading permits; field verification during construction</p>	<p>Once per individual development project for construction specification review/approval; field verification periodically throughout construction</p>	<p>LBDS, OCM</p>		

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
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<p>The City's recommended measures for reducing construction-related GHG emissions at the time of writing this PEIR are listed below and the project applicant(s) shall, at a minimum, be required to implement the following:</p> <ul style="list-style-type: none"> • Improve fuel efficiency from construction equipment: <ul style="list-style-type: none"> ○ reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort), ○ perform equipment maintenance (inspections, detect failures early, corrections), ○ train equipment operators in proper use of equipment, ○ use the proper size of equipment for the job, and ○ use equipment with new technologies (repowered engines, electric drive trains). • Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power. • Use an ARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment (emissions of NO_x from the use of low carbon fuel must be reviewed and increases mitigated). Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program (ARB 2010a). • Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes. • Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones. • Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75 percent by weight). 						

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<ul style="list-style-type: none"> Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials). Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option. Produce concrete onsite if determined to be less emissive than transporting ready mix. Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from ARB's Heavy-Duty Vehicle GHG Measure (ARB 2010b) and EPA (EPA 2010). Develop a plan to efficiently use water for adequate dust control. This may consist of the use of non-potable water from a local source. 						
<p>Mitigation Measure GHG-2(a) Implement Mitigation Measure AQ-3. Implementation of the mitigation measures described in Section 4.2, which would reduce operational emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The operational mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.</p>	Verification that required measures have been incorporated into final building plans for individual development projects	Prior to issuance of building permits	Once per individual development project	LBDS		
<p>Mitigation Measure GHG-2(b) Implement Additional Measures to Reduce Operational GHG Emissions. For each increment of new development within the Project area requiring a discretionary approval (e.g., tentative subdivision map, conditional use permit, improvement plan), measures that reduce GHG emissions to the extent feasible and to the extent appropriate with respect to the state's progress at the time toward meeting GHG emissions reductions required by the California Global Warming Solutions Act of 2006 (AB 32) shall be imposed,</p>	Verification that required measures have been incorporated into final building plans for individual development projects	Prior to issuance of building permits	Once per individual development project	LBDS		

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<p>as follows:</p> <ul style="list-style-type: none"> The project applicant shall incorporate feasible GHG reduction measures that, in combination with existing and future regulatory measures developed under AB 32, will reduce GHG emissions associated with the operation of future project development phases and supporting roadway and infrastructure improvements by an amount sufficient to achieve the goal of 6.6 CO₂e/SP/year, if it is feasible to do so. The feasibility of potential GHG reduction measures shall be evaluated by the City at the time each phase of development is proposed to allow for ongoing innovations in GHG reduction technologies and incentives created in the regulatory environment. For each increment of new development, the project applicant shall obtain a list of potentially feasible GHG reduction measures to be considered in the development design from the City. The City's list of potentially feasible GHG reduction measures shall reflect the current state of the regulatory environment, which will continuously evolve under the mandate of AB 32. The project applicant(s) shall then submit to the City a mitigation report that contains an analysis demonstrating which GHG reduction measures are feasible for the associated reduction in GHG emissions, and the resulting CO₂e/SP/year metric. The report shall also demonstrate why measures not selected are considered infeasible. The mitigation report must be reviewed and approved by the City for the project applicant(s) to receive the City's discretionary approval for the applicable increment of development. In determining what measures should appropriately be imposed by a local government under the circumstances, the following factors shall be considered: <ul style="list-style-type: none"> The extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the Project site are projected to decrease over 						

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<p>time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted in the future by ARB or other public agency pursuant to AB 32, or by EPA;</p> <ul style="list-style-type: none"> o The extent to which mobile-source GHG emissions, which at the time of writing this PEIR comprise a substantial portion of the state's GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length; o The extent to which GHG emissions emitted by the mix of power generation operated by SCE, the electrical utility that will serve the Project site, are projected to decrease pursuant to the Renewables Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation; o The extent to which replacement of CCR Title 24 with the California Green Building Standards Code or other similar requirements will result in new buildings being more energy efficient and consequently more GHG efficient; o The extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies, and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB's implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions; o The extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, effecting cost-benefit analyses that determine economic feasibility; and o Whether the total costs of proposed mitigation for 						

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<p>GHG emissions, together with other mitigation measures required for the proposed development, are so great that a reasonably prudent property owner would not proceed with the project in the face of such costs.</p> <ul style="list-style-type: none"> In considering how much, and what kind of, mitigation is necessary in light of these factors, the following list of options shall be considered, though the list is not intended to be exhaustive, as GHG-emission reduction strategies and their respective feasibility are likely to evolve over time. These measures are derived from multiple sources including the Mitigation Measure Summary in Appendix B of the California Air Pollution Control Officer's Association (CAPCOA) white paper, <i>CEQA & Climate Change (CAPCOA 2008)</i>; CAPCOA's <i>Model Policies for Greenhouse Gases in General Plans</i> (CAPCOA 2009); and the California Attorney General's Office publication, <i>The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level</i> (California Attorney General's Office 2010). <p>Energy Efficiency</p> <ul style="list-style-type: none"> Include clean alternative energy features to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines). Design buildings to meet CEC Tier II requirements (e.g., exceeding the requirements of Title 24 [as of 2007] by 20 percent). Site buildings to take advantage of shade and prevailing winds and design landscaping and sun screens to reduce energy use. Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings. Install light-colored "cool" pavements, and 							

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<p>strategically located shade trees along all bicycle and pedestrian routes.</p> <p>Water Conservation and Efficiency</p> <ul style="list-style-type: none"> o With the exception of ornamental shade trees, use water-efficient landscapes with native, drought-resistant species in all public area and commercial landscaping. Use water-efficient turf in parks and other turf-dependent spaces. o Install the infrastructure to use reclaimed water for landscape irrigation and/or washing cars. o Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. o Design buildings and lots to be water efficient. Only install water-efficient fixtures and appliances. o Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces. These restrictions should be included in the Covenants, Conditions, and Restrictions of the community. o Provide education about water conservation and available programs and incentives. o To reduce storm water runoff, which typically bogs down wastewater treatment systems and increases their energy consumption, construct driveways to single-family detached residences and parking lots and driveways of multi-family residential uses, with pervious surfaces. Possible designs include Hollywood drives (two concrete strips with vegetation or aggregate in between) and/or the use of porous concrete, porous asphalt, turf blocks, or pervious pavers. <p>Solid Waste Measures</p> <ul style="list-style-type: none"> o Reuse and recycle construction and demolition 							

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<p>waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).</p> <ul style="list-style-type: none"> o Provide interior and exterior storage areas for recyclables and green waste at all buildings. o Provide adequate recycling containers in public areas, including parks, school grounds, golf courses, and pedestrian zones in areas of mixed-use development. o Provide education and publicity about reducing waste and available recycling services. <p>Transportation and Motor Vehicles</p> <ul style="list-style-type: none"> o Promote ride-sharing programs and employment centers (e.g., by designating a certain percentage of parking spaces for ride-sharing vehicles, designating adequate passenger loading zones and waiting areas for ride-share vehicles, and providing a website or message board for coordinating ride-sharing). o Provide the necessary facilities and infrastructure in all land use types to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations). o At industrial and commercial land uses, all forklifts, "yard trucks," or vehicles that are predominately used onsite at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption. 						
HAZARDS AND HAZARDOUS MATERIALS						
<p>Mitigation Measure Haz-1(a) Prior to issuance of a demolition or renovation permit, a lead-based paint and asbestos survey shall be performed by a licensed sampling company. The lead-based paint survey shall be prepared for any structures pre-dating 1982; an asbestos</p> <p>Key: PWD – City of Long Beach Public Works Department LBDS – City of Long Beach Development Services Department OCM – Onsite Construction Manager</p>	<p>Review and approval of survey findings for individual development projects involving demolition of a pre-</p>	<p>Prior to issuance of demolition permits</p>	<p>Once per individual development project involving demolition of a</p>	<p>LBDS</p>		

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<p>survey shall be performed for asbestos-containing insulation for any structure pre-dating 1986; and an asbestos survey shall be performed for asbestos-containing drywall for all structures for which drywall is to be removed. All testing procedures shall follow California and federal protocol. The lead-based paint and asbestos survey report shall quantify the areas of lead-based paint and asbestos-containing materials pursuant to California and federal standards.</p>	<p>1986 structure; verification that abatement has been conducted</p>		<p>pre-1986 structure</p>			
<p>Mitigation Measure Haz-1(b) Prior to any demolition or renovation, onsite structures that contain asbestos must have the asbestos-containing material removed according to proper abatement procedures recommended by the asbestos consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only asbestos trained and certified abatement personnel shall be allowed to perform asbestos abatement. All asbestos-containing material removed from onsite structures shall be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. Following completion of the asbestos abatement, the asbestos consultant shall provide a report documenting the abatement procedures used, the volume of asbestos-containing material removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party and a copy shall be submitted to the City of Long Beach prior to issuance of a demolition or construction permit.</p>	<p>Review and approval of survey findings for individual development projects involving demolition of a pre-1986 structure; verification that abatement has been conducted</p>	<p>Prior to issuance of demolition permits</p>	<p>Once per individual development project involving demolition of a pre-1986 structure</p>	<p>LBDS</p>		
<p>Mitigation Measure Haz-1(c) Prior to the issuance of a permit for the renovation or demolition of any structure, a licensed lead-based paint consultant shall be contracted to evaluate the structure for lead-based paint. If lead-based paint is discovered, it shall be removed according to proper abatement procedures recommended by the consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only lead-based paint trained and certified</p>	<p>Review and approval of survey findings for individual development projects involving demolition of a pre-1982 structure; verification that abatement has been conducted</p>	<p>Prior to issuance of demolition permit</p>	<p>Once per individual development project involving demolition of a pre-1982 structure</p>	<p>LBDS, OCM</p>		

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<p>abatement personnel shall be allowed to perform abatement activities. All lead-based paint removed from these structures shall be hauled and disposed of by a transportation company licensed to transport this type of material. In addition, the material shall be taken to a landfill or receiving facility licensed to accept the waste. Following completion of the lead-based paint abatement, the lead-based paint consultant shall provide a report documenting the abatement procedures used, the volume of lead-based paint removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party, with a copy submitted to the City of Long Beach prior to issuance of a demolition or construction permit.</p>						
<p>Mitigation Measure Haz-3(a) All excavation and demolition projects conducted within the Project area shall be required to prepare a contingency plan to identify appropriate measures to be followed if contaminants are found or suspected or if structural features that could be associated with contaminants or hazardous materials are suspected or discovered. The contingency plan shall identify personnel to be notified, emergency contacts, and a sampling protocol to be implemented. The excavation and demolition contractors shall be made aware of the possibility of encountering unknown hazardous materials and shall be provided with appropriate contact and notification information. The contingency plan shall include a provision stating under what circumstances it would be safe to continue with the excavation or demolition, and shall identify the person authorized to make that determination.</p>	<p>Review and approval of Contingency Plan prior to issuance of grading permits for individual development projects</p>	<p>Prior to issuance of grading permits</p>	<p>Once per individual development project</p>	<p>LBDS, OCM</p>		
<p>Mitigation Measure Haz-3(b) If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (Long Beach/Signal Hill Certified Unified Program Agency [CUPA], LARWQCB, or the state DTSC). Prior to any other ground disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the</p>	<p>Verification that a RWQCB de-water and discharge permit has been obtained for individual development projects (if necessary)</p>	<p>Prior to issuance of demolition permits</p>	<p>As necessary for individual development projects</p>	<p>LBDS</p>		

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<p>property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received.</p> <p>Groundwater is subject to pre-treatment during de-watering activities to meet National Pollutant Discharge Elimination System (NPDES) Construction Dewatering permit limits. The construction activities shall conform to the NPDES requirements. The RWQCB requires the water to be tested for possible pollutants. The developer shall collect groundwater samples from existing site wells to determine pre-treatment system requirements for extracted groundwater. A water treatment system shall be designed and installed for treatment of extracted groundwater removed during dewatering activities so that such water complies with the applicable RWQCB and NPDES permit standards before disposal.</p>						
<p>Mitigation Measure Haz-3(c) If concentrations of contaminants warrant site remediation, contaminated materials shall be remediated either prior to construction of structures or concurrent with construction. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation. The remediation program shall also be approved by a regulatory oversight agency (Long Beach/Signal Hill CUPA, LARWQCB, or the state DTSC). All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, the analytical results after completion of the remediation, and all waste disposal or treatment manifests.</p>	<p>Verification that remediation has occurred for individual development projects (if necessary)</p>	<p>Prior to issuance of grading permits</p>	<p>As necessary for individual development projects</p>	<p>LBDS</p>		
<p>Mitigation Measure Haz-3(d) If during the soil sampling, groundwater contamination is suspected or soil contamination is detected at depths at which groundwater could be encountered during demolition or construction, a groundwater sampling assessment shall be performed. If</p>	<p>Verification that site closure has been obtained from the applicable regulatory body for individual</p>	<p>Review prior to issuance of demolition permit; field verification</p>	<p>Review, as needed throughout construction for field verification</p>	<p>LBDS</p>		

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contaminants are detected in groundwater at levels that exceed maximum contaminant levels for those constituents in drinking water, or if the contaminants exceed health risk standards such as Preliminary Remediation Goals, 1 in 1 million cancer risk, or a health risk index above 1, the results of the groundwater sampling shall be forwarded to the appropriate regulatory agency (Long Beach/Signal Hill CUPA, LARWQCB, or the State DTSC). Prior to any other ground-disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received.	development projects	during construction				
HYDROLOGY AND WATER QUALITY						
<p>Mitigation Measure Hydro-1 Prior to issuance of a grading permit, the City Department of Development Services shall determine the need for the developer to prepare a SWPPP for the site. If required, the SWPPP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any grading or building permits. The SWPPP shall fully comply with City and LARWQCB requirements and shall contain specific BMPs to be implemented during project construction to reduce erosion and sedimentation to the maximum extent practicable. The following BMPs or equivalent measures to control pollutant runoff shall be included within the project's grading and construction plans, if applicable:</p> <p><u>Pollutant Escape: Deterrence</u></p> <ul style="list-style-type: none"> Cover all storage areas, including soil piles, fuel and chemical depots. Protect from rain and wind with plastic sheets and temporary roofs. Implement tracking controls to reduce the tracking of sediment and debris from the construction site. At a minimum, entrances and exits shall be inspected daily 	Review and approval of final grading and construction plans for individual development projects to verify compliance with applicable SWPPP requirements	Prior to issuance of grading permits	Once per individual development project for which an SWPPP is required	LBDS, OCM		

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<p>and controls implemented as needed.</p> <ul style="list-style-type: none"> Implement street sweeping and vacuuming as needed and as required. <p><u>Pollutant Containment Areas</u></p> <ul style="list-style-type: none"> Locate all construction-related equipment and related processes that contain or generate pollutants (i.e., fuel, lubricants, solvents, cement dust, and slurry) in isolated areas with proper protection from escape. Locate construction-related equipment and processes that contain or generate pollutants in secure areas, away from storm drains and gutters. Place construction-related equipment and processes that contain or generate pollutants in bermed and plastic-lined depressions to contain all materials within that site in the event of accidental release or spill. Park, fuel, and clean all vehicles and equipment in one designated, contained area. <p><u>Pollutant Detainment Methods</u></p> <ul style="list-style-type: none"> Protect downstream drainages from escaping pollutants by capturing materials carried in runoff and preventing transport from the site. Examples of detainment methods that retard movement of water and separate sediment and other contaminants are silt fences, hay bales, sand bags, berms, and silt and debris basins. <p><u>Recycling/Disposal</u></p> <ul style="list-style-type: none"> Develop a protocol for maintaining a clean site. This includes proper recycling of construction-related materials and equipment fluids (i.e., concrete dust, cutting slurry, motor oil, and lubricants). Provide disposal facilities. Develop a protocol for cleanup and disposal of small construction wastes (i.e., dry concrete). <p><u>Hazardous Materials Identification and Response</u></p> <ul style="list-style-type: none"> Develop a protocol for identifying risk operations and 						

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<p>materials. Include protocol for identifying source and distribution of spilled materials.</p> <ul style="list-style-type: none"> Provide a protocol for proper clean-up of equipment and construction materials, and disposal of spilled substances and associated cleanup materials. Provide an emergency response plan that includes contingencies for assembling response teams and immediately notifying appropriate agencies. 						
<p>Mitigation Measure Hydro-2 Prior to issuance of a building permit, the Department of Development Services shall determine the need for the developer to prepare a SUSMP for the site. If required, the SUSMP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any building permits. The City's review shall include a determination of whether installation of pollutant removal technology in existing or proposed storm drains adjacent to the project site should be required. The City's review is required to confirm that the SUSMP is consistent with the City's NPDES Permit No. CAS 004003 or a subsequently issued NPDES permit applicable at the time of project construction. A SUSMP consistent with the City's NPDES permit shall be incorporated into the project design plans prior to issuance of any building permits.</p>	<p>Review and approval of SUSMP for individual development projects for which an SUSMP is required</p>	<p>prior to issuance of grading permits</p>	<p>Once per individual development project for which an SUSMP is required</p>	<p>LBDS</p>		
<p>Mitigation Measure Hydro-3 Prior to issuance of a building permit, the City Stormwater Management Division shall determine the need for the developer to conduct an analysis of the existing stormwater drainage system and to identify improvements needed to accommodate any projected increased runoff that would result from the proposed Project. The evaluation conducted by the developer shall include a determination of whether Low Impact Development (LID) practices and strategies should be incorporated into the project to reduce post-development peak stormwater runoff discharge rates to not exceed the estimated pre-development discharge rates.</p>	<p>Verification that required review of storm drain systems has been conducted for individual development projects and that needed improvements have been incorporated</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>LBDS, PWD</p>		

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NOISE						
<p>Mitigation Measure Noise-1(a) The following measures shall be applied to proposed construction projects that are determined to have potential noise impacts from removal of existing pavement and structures, site grading and excavation, pile driving, building framing, and concrete pours and paving:</p> <ul style="list-style-type: none"> • All internal combustion-engine-driven equipment shall be equipped with mufflers that are in good operating condition and appropriate for the equipment. • "Quiet" models of air compressors and other stationary construction equipment shall be employed where such technology exists. • Stationary noise-generating equipment shall be located as far as reasonable from sensitive receptors when sensitive receptors adjoin or are within 150 feet of a construction site. • Unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes) shall be prohibited. • Foundation pile holes shall be predrilled, as feasible based on geologic conditions, to minimize the number of impacts required to seat the pile. • Construction-related traffic shall be routed along major roadways and away from noise-sensitive receptors. • Construction activities, including the loading and unloading of materials and truck movements, shall be limited to the hours specified in the City Noise Ordinance (Section 8.80.202). • Businesses, residences, and noise-sensitive land uses within 150 feet of construction sites shall be notified of the construction. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of the complaint and response procedure. • Each project implemented as part of the Plan shall 	<p>Verification that construction specifications for individual development projects incorporate applicable requirements; field verification of compliance</p>	<p>Construction specification review prior to issuance of demolition permits; field verification during construction</p>	<p>Once per individual development project for construction specification review; field verification periodically throughout construction of individual development projects</p>	<p>LBDS, OCM</p>		

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<p>designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. A telephone number for the liaison shall be conspicuously posted at the construction site.</p> <ul style="list-style-type: none"> If a noise complaint(s) is registered, the liaison, or project representative, shall retain a City-approved noise consultant to conduct noise measurements at the location that registered the complaint. The noise measurements shall be conducted for a minimum of 1 hour and shall include 1-minute intervals. The consultant shall prepare a letter report summarizing the measurements and potential measures to reduce noise levels to the maximum extent feasible. The letter report shall include all measurement and calculation data used in determining impacts and resolutions. The letter report shall be provided to code enforcement for determining the adequacy and if the recommendations are adequate. 						
<p>Mitigation Measure Noise-1(b) The City will require the following measures, where applicable based on noise level of source, proximity of receptors, and presence of intervening structures, to be incorporated into contract specifications for construction projects within 150 feet of existing residential uses implemented under the proposed Plan:</p> <ul style="list-style-type: none"> Temporary noise barriers shall be constructed around construction sites adjacent to, or within 150 feet of, operational business, residences, or other noise-sensitive land uses. Temporary noise barriers shall be constructed of material with a minimum weight of 4 pounds per square foot with no gaps or perforations. Noise barriers may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. 	<p>Verification that construction specifications for individual development projects within 150 feet of noise sensitive uses incorporate applicable requirements; field verification of compliance</p>	<p>Construction specification review prior to issuance of demolition permits; field verification during construction</p>	<p>Once per individual development project for construction specification review; field verification periodically throughout construction of individual development projects</p>	<p>LBDS, OCM</p>		

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<p>If a project-specific noise analysis determines that the barriers described above would not be sufficient to avoid a significant construction noise impact, a temporary sound control blanket barrier, shall be erected along building façades facing construction sites. This mitigation would only be necessary if conflicts occurred that were irresolvable by proper scheduling and other means of noise control were unavailable. The sound blankets are required to have a minimum breaking and tear strength of 120 pounds and 30 pounds, respectively. The sound blankets shall have a minimum sound transmission classification of 27 and noise reduction coefficient of 0.70. The sound blankets shall be of sufficient length to extend from the top of the building and drape on the ground or be sealed at the ground. The sound blankets shall have a minimum overlap of 2 inches.</p> <p>Mitigation Measure Noise-2 The City shall review all construction projects for potential vibration-generating activities from demolition, excavation, pile-driving, and construction within 100 feet of existing structures and shall require site-specific vibration studies to be conducted to determine the area of impact and to identify appropriate mitigation measures. The studies shall, at a minimum, include the following:</p> <ul style="list-style-type: none"> • Identification of the project's vibration compaction activities, pile driving, and other vibration-generating activities that have the potential to generate ground-borne vibration; and the sensitivity of nearby structures to ground-borne vibration. This task should be conducted by a qualified structural engineer. • A vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; establish a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for actions to be taken when vibration levels approached 	<p>Verification that vibration analysis and contingency plans have been prepared for individual development projects; verification, including field verification, that post-construction surveys have been conducted and any vibration-related damage has been repaired</p>	<p>Verification that vibration analysis and plan prepared prior to issuance of demolition/grading permits; verification that post-construction survey conducted prior to issuance of occupancy permits</p>	<p>Once per individual development project for vibration analysis/plan; once post-construction survey</p>	<p>LBDS, OCM</p>		

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<p>the defined vibration limits.</p> <ul style="list-style-type: none"> Maintain a monitoring log of vibrations during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for a more or less intensive measurement schedule. Vibration levels limits for suspension of construction activities and implementation of contingencies to either lower vibration levels or secure the affected structures. Post-construction survey on structures where either monitoring has indicated high vibration levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities. <p>Mitigation Measure Noise-5 In areas where new residential development would be exposed than L_{dn} of greater than 65 dBA, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following:</p> <ul style="list-style-type: none"> Utilize site planning to minimize noise in shared residential outdoor activity areas by locating the areas behind the buildings or in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible. Provide mechanical ventilation in all residential units proposed along roadways or in areas where noise levels could exceed 65 dBA L_{dn}, so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 45 dBA L_{dn}. <p>Install sound-rated windows and construction methods to provide the requisite noise control for residential units proposed along roadways or in areas where noise levels could exceed 70 dBA L_{dn}.</p> <p>Mitigation Measure Noise-6 In areas where new residential development would be located adjacent to commercial uses, the City will require site-specific noise studies prior to issuance of building permits to determine</p>	<p>Review and approval of acoustical analysis for individual residential development projects; verification that final building plans incorporate recommended noise reduction techniques</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual residential development project</p>	<p>LBDS, OCM</p>		
<p>Mitigation Measure Noise-6 In areas where new residential development would be located adjacent to commercial uses, the City will require site-specific noise studies prior to issuance of building permits to determine</p>	<p>Review and approval of acoustical analysis for individual residential</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual residential development</p>	<p>LBDS, OCM</p>		

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<p>the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following:</p> <ul style="list-style-type: none"> Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses. Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible. <p>Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.</p>	<p>development projects; verification that final building plans incorporate recommended noise reduction techniques</p>		project			
<p>Mitigation Measure I-5: The project developer shall retain the services of a qualified acoustical engineer with expertise in design of building sound isolations, who shall submit a signed report to the City during plan check for review and approval, which demonstrates that the proposed building design for the residential uses and the hotel building achieves an interior sound environment of 45 dBA (CNEL), as required by City's building code.</p>	<p>Verification that a signed acoustical report has been submitted by the applicant for individual development projects</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>LBDS</p>		
Traffic and Circulation						
<p>Mitigation Measure Traf-1(a) As the system's capacity is reached, it will become important to manage the street system in a more efficient and coordinated manner. Improvements to the Project area transportation system are proposed as part of the overall Downtown development, including improvements that have been required of other area projects previously approved by the City. Therefore, the mitigation focuses on improvements that would not require significant additional rights-of-way and are achievable within the life of the Plan. There are five proposed mitigation measures for the Downtown Plan,</p>	<p>Review of the traffic impacts of individual development projects to determine whether listed improvements are needed at that time; implementation of planned improvements as necessary</p>	<p>Prior to issuance of occupancy permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		

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 OCM – Onsite Construction Manager

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<p>as follows:</p> <ol style="list-style-type: none"> 1. Implement traffic control system improvements in Downtown on selected arterials. 2. Improve the Alamitos Avenue corridor via removal of selected parking spaces and the implementation of additional travel lanes plus bike lanes in each direction. 3. Reconfigure the 6th Street and 7th Street intersections with Martin Luther King Avenue and Alamitos Avenue for safety and traffic flow enhancements. 4. Enhance freeway access to I-710 to and from Downtown Long Beach. 5. Implement transit facilities and programs to encourage public transit usage and Transportation Demand Management Policies. 						
<p>Mitigation Measure Traf-1(b) A series of traffic signal system improvements are recommended in Downtown to accommodate the anticipated growth in travel. The following traffic signal system improvements are recommended as part of this mitigation measure:</p> <ol style="list-style-type: none"> 1. Implement Adaptive Traffic Signal Control System (ATCS) improvements throughout Downtown consistent with currently planned improvements on Ocean Boulevard and Atlantic Avenue. Streets that are proposed to be included in the ATCS as a mitigation measure for the Downtown Long Beach Strategic Plan include the following: <ul style="list-style-type: none"> • Alamitos Avenue north of Ocean Boulevard • Pine Avenue north of Ocean Boulevard • Pacific Avenue north of Ocean Boulevard • 7th Street from I-710 to Alamitos Avenue • 6th Street from I-710 to Alamitos Avenue • Broadway from I-710 to Alamitos Avenue • Ocean Boulevard from Shoreline to Alamitos Avenue (to join the proposed system starting at 	<p>Review of the traffic impacts of individual development projects to determine whether listed improvements are needed at that time; implementation of planned improvements as necessary</p>	<p>Prior to issuance of occupancy permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		

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<p>Alamitos Avenue)</p> <ul style="list-style-type: none"> Others as needed, to be determined by the City Traffic Engineer and Public Works Director <p>2. Implement pan/tilt/zoom Closed Circuit Television Camera (CCTV) surveillance and communications with power and control capability to the Department of Public Works to monitor real-time traffic operations from rooftops of selected new buildings as needed and to be determined based on the location of appropriate new high-rise structures along the Alamitos Avenue, Shoreline Drive, and Ocean Boulevard corridors.</p> <p>3. Implement transit signal priority for Long Beach Boulevard and upgrade traffic signal system equipment and operations along the Blue Line light rail route.</p> <p>4. Upgrade and improve traffic signal equipment throughout Downtown for safety and operational enhancements.</p> <p>Mitigation Measure Traf-1(c) As part of this mitigation measure, a number of intersections would receive major or minor signal modifications, depending on their current status. In addition to the enhancements listed, other potential improvements that can be included are:</p> <ul style="list-style-type: none"> Bicycle improvements (detection, signalization, etc.) In-pavement LED crosswalk lights Automatic pedestrian detection (i.e., infrared, microwave, or video detection) Illuminated push buttons Countdown pedestrian signals Adaptive pedestrian clearance (increasing the flashing DON'T WALK time based on location of pedestrians in the crosswalk) Enhanced signal equipment including mast arms, poles, signal heads, and other necessary enhancements for safety and operations 	<p>Review of the traffic impacts of individual development projects to determine whether listed improvements are needed at that time; implementation of planned improvements as necessary</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		

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<p>Communications enhancements as needed to tie the system together with the Traffic Control Center in City Hall</p> <p>Mitigation Measure Traf-1(d) Traffic Calming and Pedestrian Amenities. Appropriate traffic calming and pedestrian amenities shall be provided in conjunction with development projects. Potential improvements include corner curb extensions, enhanced paving of crosswalks, and pedestrian-activated signals at mid-block crossings to make it easier for pedestrians to cross the street and to make them more visible to motorists. Other potential improvements include wider sidewalks in locations where the existing sidewalks are less than 10 feet wide, pedestrian-scale street lights, and street furniture (City of Long Beach 2005).</p>	<p>Review and approval of improvement plans for individual development projects to verify compliance with City requirements</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD</p>		
<p>Traf-1(e) Currently, due to on-street parking, there is only one lane of travel on Alamitos Avenue in the southbound direction between 3rd Street and Broadway. Parking spaces on the west side of Alamitos Avenue will be removed, the street will be restriped and reconstructed, a bike lane will be added in each direction of travel, and the street will provide for two travel lanes in each direction plus exclusive left turn lanes from 7th Street to Ocean Boulevard. Traffic signal enhancements to implement the Alamitos Avenue improvements shall also be implemented as needed.</p>	<p>Review of the traffic impacts of individual development projects to determine whether listed improvements are needed at that time; implementation of planned improvements as necessary</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		
<p>Traf-1(f) Developments in the project area will be required to coordinate with area transit providers to accommodate and encourage transit use by residents and patrons. For non-residential sites, appropriate programs and facilities will be included to encourage car and van pooling, provide information on transportation alternatives, and encourage trip reduction strategies in accordance with the City's TDM policies for non-residential development.</p>	<p>Review and approval of improvement plans for individual development projects to verify compliance with City requirements</p>	<p>Prior to issuance of building permits</p>	<p>Once per individual development project</p>	<p>PWD, LBDS</p>		
UTILITIES/SERVICE SYSTEMS						
<p>Mitigation Measure Utilities-3(a) All construction related to Project implementation shall include verification by the construction contractor that all companies providing waste disposal services recycle all demolition and construction-</p>	<p>Verification that construction specifications for individual development</p>	<p>Prior to issuance of demolition or building permits</p>	<p>Once per individual development project</p>	<p>LBDS</p>		

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related wastes. The contract specifying recycled waste service shall be submitted to the City Building Official prior to approval of the certificate of occupancy	projects include use of a waste disposal company that recycles demolition and construction wastes						
Mitigation Measure Utilities-3(b) In order to facilitate onsite separation and recycling of construction related wastes, all construction contractors shall provide temporary waste separation bins onsite during demolition and construction.	Review and approval of construction waste management plan for individual development projects; field verification of compliance	Review and approval of construction waste management plan prior to issuance of demolition permit; field verification during construction	Once per individual development project for plan review; periodically throughout construction	LBDS, OCM			
Mitigation Measure Utilities-3(c) All future developments in the Project area shall include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and all other recyclable materials. Materials from these bins shall be collected on a regular basis consistent with the City's refuse disposal program.	Review and approval of final building plans for individual development projects; field verification of compliance	Building plan review and approval prior to issuance of building permit; field verification prior to issuance of occupancy permits	Once per individual development project for building plan review and approval; once for field verification	LBDS			
Mitigation Measure Utilities-3(d) All Project area residents and commercial tenants shall be provided with educational materials on the proper management and disposal of household hazardous waste, in accordance with educational materials made available by the Los Angeles County Department of Public Works.	Verification that educational materials are made available to project occupants of individual development projects	Prior to issuance of occupancy permits	Once per individual development project	LBDS			

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