BROADWAY PLAZA
Long-Range Master Plan
Draft Environmental Impact Report
State Clearinghouse #2011112011

Prepared for
City of Walnut Creek

March 2012
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<td>AADT</td>
<td>average annual daily traffic</td>
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**D**

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**E**

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<td>Essential Fish Habitat</td>
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**List of Acronyms and Abbreviations**

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<td>global warming potential</td>
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<td>million gallon(s) per day</td>
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<td>MLD</td>
<td>most likely descendant</td>
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<td>mean low water</td>
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<td>million metric tons</td>
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<td>millimeter(s) per year</td>
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<td>parallel climate model</td>
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<td>Sustainable Communities Strategy</td>
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<td>Trichloroethylene</td>
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<td>Total Maximum Daily Load</td>
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V

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W

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<td>Waste Reduction and Recycling Plan</td>
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CHAPTER 1
Introduction

1.1 Project Overview

The City of Walnut Creek (City) prepared this Environmental Impact Report (EIR) to address the physical and environmental effects of the Broadway Plaza Long Range Master Plan project (Project). The Project Site is located within the City of Walnut Creek (see Figure 1-1). The Project includes a net increase of up to 300,000 gross square feet of commercial space, or a net increase of up to 400,000 gross square feet of mixed commercial and residential uses; reconstruction of 200,000 square feet of commercial space; and interior, cosmetic or façade improvements to the rest of the Broadway Plaza shopping center.

Residential uses (including accessory uses) would be allowed if they are swapped for commercial square footage at the rate of 2,000 gross square feet of residential uses for every 1,000 gross square feet of commercial space replaced. Residential uses would be limited to 200 units and 200,000 gross square feet. Ancillary uses, described below, are also proposed. The Project would result in approximately 1,100,000 total gross square feet of commercial uses in Broadway Plaza, or approximately 1,200,000 total gross square feet in a combination of commercial and residential uses. The Project’s design will incorporate gathering places and a pedestrian-friendly orientation, and is intended to create a more auto-free experience at Broadway Plaza. The Project proposes to vacate most of Broadway Plaza street, a public street that currently runs through the shopping center, to allow for a more pedestrian-friendly configuration of the Project Site. A subdivision map, or merger and lot-line adjustment, is proposed to facilitate implementation of these parcel line modifications.

The Project applications include a General Plan Amendment to affect every parcel on the Project Site except Parcel 2 (which was the subject of a recent initiative, Measure I in 2009, and which includes the site of the Neiman Marcus store). The proposed changes for the remainder of the Project Site would include:

- General Plan Category: The Project would amend the General Plan land use category from PR (Pedestrian Retail) to MU-C (Mixed-Use, Commercial Emphasis). This General Plan Amendment would allow mixed commercial and residential uses on the Project Site.

- Establish New FAR: By virtue of its current PR land use category designation, the existing FAR on the Project Site is 0.75. Changing the land use category from PR to MU-C will increase the FAR to 0.85. The Project Applicants have asked to further increase the FAR on the Project Site to 0.95 for commercial uses and an FAR of 1.05 for
Figure 1-1
Project Site Location

SOURCE: Walnut Creek GIS
mixed uses. These proposed FAR changes would not change to the allowable FAR at any other location.

- Amend General Plan Figures: Figure 8 of Chapter 4 (Core Area FAR) of the General Plan would need to be modified to apply the 0.95 FAR for commercial uses to the Project Site, and Figure 9 (Mixed Use Floor Area Ratio) would need to be modified to apply a new 1.05 FAR for mixed commercial and residential uses to the Project Site.

The Project Applicants also seek to rezone the entire site to a new Planned Development (PD) District. The proposed zoning ordinance for this PD Zoning District would include detailed requirements and exhibits, including parking standards and restrictions, necessary for it to function as a Master Plan for long-term development of Broadway Plaza.

1.2 Environmental Review and Approval

The City of Walnut Creek is the Lead Agency for this EIR (pursuant to State and local guidelines for implementing the California Environmental Quality Act [CEQA]), and has determined that the Project is subject to CEQA (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (14 California Code of Regulations Section 15000, et seq.) promulgated thereunder (together “CEQA”).

1.2.1 Use of this EIR

Pursuant to CEQA, this EIR is a public information document prepared for use by governmental agencies and the public to identify and evaluate potential environmental consequences of the Project, to evaluate and recommend mitigation measures that would substantially lessen or eliminate significant environmental adverse impacts, and to examine a range of feasible alternatives to the Project. The information contained in this Draft EIR is subject to review and consideration by the City of Walnut Creek and any other responsible agency prior to the City’s decision to approve, reject or modify the Project.

1.2.2 EIR Scoping

On November 2, 2011, the City issued a Notice of Preparation (NOP) to announce its intent to prepare and distribute a Draft EIR for the Project. The NOP was distributed to governmental agencies, organizations, and persons interested in the Project. The City sent the NOP to agencies with statutory responsibilities in connection with the Project and requested their input on the scope and content of the environmental information that should be addressed in the EIR. The City held a Public Scoping Meeting on November 17, 2011, to accept comments regarding the scope of the EIR in response to the NOP. The City received no verbal comments. The NOP review period ended on December 5, 2011. The NOP and written comments that the City received in response to the NOP are included as Appendix A to this Draft EIR, which addresses all comments received in response to the NOP that are relevant to environmental issues. During the public scoping process for this EIR, no specific areas of controversy arose relevant to the CEQA analysis.
The City has prepared this EIR to analyze the potential environmental effects of the Project under CEQA and addresses all environmental topics identified in the CEQA Guidelines. The City elected not to prepare an Initial Study Checklist to reduce the scope of the EIR, as permitted by Section 15060(d) of the CEQA Guidelines.

1.2.3 Public Review

This Draft EIR is available for public review and comment for the period identified on the notice accompanying this document (45 calendar days). During the public review and comment period, written comments on the Draft EIR may be submitted to the City at the address indicated on the notice. Verbal comments may be stated at the public hearing on the Draft EIR, which will be held as indicated on the above-referenced notice.

Following the public review and comment period for the Draft EIR, the City will prepare responses that address all substantive written and verbal comments on the Draft EIR’s environmental analyses and that are received within the specified review period. The City’s responses and any other revisions to the Draft EIR will be prepared as a Responses to Comments document (commonly referred to as the Final EIR). The Draft EIR and its Appendices, together with the Response to Comments document actually constitute the Final EIR (commonly referred to collectively as “EIR”) for the Project.

Prior to approval of the Project, the City must review and certify the Final EIR and adopt a Mitigation Monitoring and Reporting Program (MMRP) for all mitigation measures identified in the Final EIR.

1.3 Organization of the Draft EIR

Following this Chapter 1, Introduction, this Draft EIR is organized as follows:

Chapter 2, Summary, contains a brief summary of the Project and is an easy reference to the analysis presented in the Draft EIR. It is prepared for use as a stand-alone summary of the Draft EIR. A Summary of Impacts, Mitigation Measures, and Residual Impacts table is provided at the end of Chapter 2 as a reader-friendly reference to each of the environmental impacts, proposed mitigation measures and residual environmental impacts after mitigation is implemented. Chapter 2 also summarizes the analysis of alternatives to the Project, areas of controversy, and issues to be resolved.

Chapter 3, Project Description, describes in detail the Project Site and surroundings, the background of the Project; Project characteristics (including anticipated development steps and entitlements and approvals requested or required), and Project objectives. Chapter 3 also identifies other agencies that must consider or approve aspects of the Project.

Chapter 4, Environmental Setting, Impacts and Mitigation Measures, discusses the environmental setting (existing physical conditions and regulatory framework), the environmental impacts of the
Project and cumulative conditions that could result from the Project. This chapter also identifies mitigation measures that, after implementation, would reduce or eliminate significant impacts.

Chapter 5, *Alternatives*, evaluates a reasonable range of alternatives to the Project and identifies an environmentally superior alternative.

Chapter 6, *Impact Overview and Growth Inducement*, summarizes the potentially significant and unavoidable impacts and the cumulative impacts that could result with the Project, as they are identified throughout Chapter 4. Chapter 6 also describes the Project’s potential for inducing growth, as well as the Project’s significant, irreversible effects and less-than-significant effects.

Chapter 7, *Report Preparers*, identifies the authors of the EIR, including City staff and the EIR consultant team. The key consultants who provided technical resources for the EIR are also identified in this chapter.

*Appendices* to the Draft EIR are provided at the end of the document and include the NOP, Responses to the NOP, as well as certain supporting background documents used for the impact analyses for specific topics. Reference documents and persons contacted to prepare the EIR analyses are listed at the end of each analysis section in Chapter 4, *Environmental Setting, Impacts and Mitigation Measures*. The appendices to the Draft EIR are available for review by the public on the City’s website at www.walnut-creek.org/citygov/depts/cd/planning/projects.asp, the Walnut Creek Downtown Branch Library at 1644 North Broadway, and at City Hall, 1666 North Main Street, Walnut Creek, California 94596.
CHAPTER 2

Summary

As described in Chapter 1, this chapter is prepared for use as a stand-alone summary of the Draft EIR. The information herein is summarized from throughout the document, particularly Chapters 3, Project Description; Chapter 4, Environmental Setting, Impacts and Mitigation Measures; and Chapter 5, Alternatives. The Project Overview that follows is largely restated from Section 1.1, Project Overview.

2.1 Project Overview

The Broadway Plaza Long Range Master Plan project (Project) is proposed in the City of Walnut Creek, at the Broadway Plaza shopping center. The Project includes a net increase of up to 300,000 gross square feet of commercial space, or a net increase of up to 400,000 gross square feet of mixed commercial and residential uses; demolition and reconstruction of 200,000 square feet of commercial space; interior improvements, and exterior architectural improvements to the rest of the Broadway Plaza shopping center.

Residential uses (including accessory uses) would be allowed if they are swapped for commercial square footage at the rate of 2,000 gross square feet of residential uses for every 1,000 gross square feet of commercial space it replaces. Residential uses would be capped at 200 units and 200,000 gross square feet. Ancillary uses, described below, are also proposed. The Project would result in approximately 1,100,000 total gross square feet of commercial uses in Broadway Plaza, or 1,200,000 total gross square feet in a combination of commercial and residential uses. The EIR evaluates the Project buildout under two scenarios: a Maximum Commercial Scenario and a Maximum Mixed-Use Scenario. These two scenarios represent outside ranges of potential uses allowed by the Project, and are proposed to ensure that all environmental impacts are captured.

The Project’s design will incorporate gathering places and a pedestrian-friendly orientation, and is intended to create a more auto-free experience at Broadway Plaza. The Project proposes to vacate most of Broadway Plaza street, a public street that currently runs through the shopping center, to allow for a more pedestrian-friendly configuration of the Project Site.

The Project applications include a General Plan Amendment to change the floor area ratio (FAR) for all areas of Broadway Plaza to a maximum of 0.95 for commercial-only uses, with the exception of the parcel in the northwest corner of the Project Site (Parcel 2) that was the subject of a recent initiative (Measure I, 2009). The Project would also change the land use designation to allow mixed commercial and residential uses for the Project Site (with the exception of Parcel 2).
The new land use designation would be consistent with applicable aspects of the existing General Plan designations. Project applications also seek to rezone the site to a new Planned Development (PD) District. The proposed zoning ordinance for this PD Zoning District would include detailed requirements and exhibits, including parking standards and restrictions, necessary for it to function as a Master Plan for long-term development of Broadway Plaza. A subdivision map, or merger and lot-line adjustment, is proposed to facilitate implementation of these parcel line modifications.

The Project would conform to existing General Plan height limits, which are more restrictive than the height limits established by Measure A, a 1985 initiative that locked in maximum heights at the height allowed by then-current zoning.

2.2 Environmental Impacts and Mitigation Measures

All impacts and mitigation measures identified in this EIR are summarized in Table 2-1, Summary of Impacts, Mitigation Measures, and Residual Impacts, at the end of this chapter. Table 2-1 includes all impact statements, recommended mitigation measures, and the level of significance of the impact after recommended mitigation measures are implemented.

This EIR identifies the following significant and unavoidable impacts with the Project, by scenario:

2.2.1 Maximum Commercial Scenario

**Significant and Potentially Unavoidable Air Quality Impact**
- **Impact AIR-3:** The Project would expose persons to substantial levels of TACs, during short-term construction activities, which may lead to adverse health effects.

**Significant and Unavoidable Greenhouse Gases and Climate Change Impact**
- **Impact GHG-1:** Construction and operation of the Project would result in a cumulatively considerable contribution towards global climate change.

**Significant and Potentially Unavoidable Noise Impact**
- **Impact NOI-2:** Traffic generated by the Project, in combination with traffic from past, present, existing, approved, pending and reasonably foreseeable future projects, if constructed simultaneously with the Project, could substantially increase traffic noise levels in the Project Area; and construction and operational noise levels in combination with traffic from past, present, existing, approved, pending and reasonably foreseeable future projects, could increase ambient noise levels.

**Significant and Unavoidable Noise Impact**
- **Impact NOI-1:** Construction activities for the Project would expose people to a substantial increase in the ambient noise levels in the vicinity of the Project.
2.2.2 Maximum Mixed-Use Scenario

Significant and Potentially Unavoidable Air Quality Impact
- **Impact AIR-3:** The Project would expose persons to substantial levels of TACs, during short-term construction activities, which may lead to adverse health effects.

Significant and Unavoidable Greenhouse Gases and Climate Change Impact
- **Impact GHG-1:** Construction and operation of the Project would result in a cumulatively considerable contribution towards global climate change.

Significant and Potentially Unavoidable Noise Impact
- **Impact NOI-2:** Traffic generated by the Project, in combination with traffic from past, present, existing, approved, pending and reasonably foreseeable future projects, if constructed simultaneously with the Project, could substantially increase traffic noise levels in the Project Area; and construction and operational noise levels in combination with traffic from past, present, existing, approved, pending and reasonably foreseeable future projects, could increase ambient noise levels.

Significant and Unavoidable Noise Impact
- **Impact NOI-1:** Construction activities for the Project would expose people to a substantial increase in the ambient noise levels in the vicinity of the Project.

2.3 Alternatives

Chapter 5, *Alternatives*, of this EIR analyzes the following alternatives to the Project:

- Alternative 1, Reduced Development Alternative – No Macy’s
- Alternative 2, Reduced Development Alternative – 96,000 Square-Foot Expansion
- Alternative 3, No Project Alternative

Alternative 2, the Reduced Development Alternative—96,000 Square-foot Expansion, is identified as the environmentally superior alternative because it would avoid and/or substantially reduce significant impacts of the Project to the greatest extent compared to the other alternatives. Specifically, Alternative 2 would reduce exposure of persons to substantial levels of Toxic Air Contaminants during construction activities to a level that is less than significant with mitigation, compared to the Project, which would result in a significant and potentially unavoidable impact (Impact AIR-3, GHG-1, NOI-1 and NOI-2). All other impacts resulting with the Project would continue to occur with Alternative 2. However, because the alternative would develop substantially less net new development and result in less new population on site, the less-than-significant effects identified for all other topics, would also occur to a lesser degree than would occur with the Project.

2.4 Areas of Controversy and Scoping Comments

The City held a Public Scoping Meeting on November 17, 2011; no verbal or written comments were received at that meeting. The following CEQA topics were among those that were raised in
written comments received in response to the NOP for this EIR (see Appendix A to this Draft EIR). Each of these CEQA topics is addressed in this Draft EIR. None of the comments received on the NOP raise areas of particular controversy or issues to be resolved.

- **Transportation and Circulation**
  - Distribution of trip generation in relation to Interstate 680 (including South Main to North Main/Lawrence Way ramps)
  - State Route 24 access
  - Bike path and pedestrian walkway connections to surrounding pedestrian and bicycle facilities to promote transit use
  - TDM measures
  - Secondary impacts on pedestrians and bicyclists from mitigation measures.
### TABLE 2-1
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

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<thead>
<tr>
<th>Environmental Impact</th>
<th>Mitigation Measures</th>
<th>Level of Significance after application of Mitigation</th>
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<td><strong>Air Quality</strong></td>
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| **Impact AIR-1:**    | Mitigation Measure AIR-1a: Construction Emission Controls. During construction, the Project Applicant shall require the construction contractor to implement the measures that are specified under BAAQMD's basic and additional construction mitigation procedures. These include:  
  - **Basic Control Measures.** These measures are required for all construction projects in the BAAQMD jurisdiction:  
    - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.  
    - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.  
    - All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.  
    - All vehicle speeds on unpaved roads shall be limited to 15 mph. Signage with this speed restriction shall be imposed where appropriate and applicable.  
    - All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.  
    - All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.  
    - Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations. | Less than Significant. |
### TABLE 2-1 (Continued)
**SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

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<td><strong>Air Quality (cont.)</strong></td>
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| Impact AIR-1 (cont.) | *Additional Control Measures.* Since unmitigated construction emissions would exceed the BAAQMD thresholds, the Project Applicants and their contractors shall implement the following additional control measures during project construction:  
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes. Clear signage shall be provided for construction workers at all access points.  
- The Project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.  
- Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.  
Require all contractors to use equipment that meets CARB’s most recent certification standard for off-road heavy duty diesel engines.  
**Mitigation Measure AIR-1b: Demolition Controls.** Demolition and disposal of any asbestos containing building material would be in accordance with the procedures specified by Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of BAAQMD’s regulations. | |
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<td><strong>Air Quality (cont.)</strong></td>
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<tr>
<td>Impact AIR-1 (cont.)</td>
<td>Mitigation Measure AIR-1c: Off-road Demolition and Grading Equipment Emission Controls. Emission of NOx associated with demolition and grading activities would exceed BAAQMD significance thresholds without mitigation. Excavators engaged in demolition and grading activities shall be equipped with Tier 4 engines. All other off-road construction equipment engaged in demolition and grading activities shall be equipped with Tier 3 or better engines.</td>
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<td>Impact AIR-2: Operation of the Project would result in increased long-term emissions of criteria pollutants (Criteria 1 and 2).</td>
<td>Mitigation Measure AIR-2a: Operational NOx Emission Reduction – Maximum Commercial Scenario. The Project Applicant shall implement a voluntary commute trip reduction program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as car-pooling, taking transit, walking, and biking. The program may include, but is not limited to, a ride-sharing program for which 50 percent or greater of Project employees are eligible, carpooling encouragement, preferential carpooling parking, a transportation coordinator, and ride matching assistance. Mitigation Measure AIR-2b: Operational Emission Controls – Maximum Mixed-Use Scenario. Natural gas-only fireplace hearths. Wood burning fireplaces shall not be installed in proposed residential units. If fireplaces are to be included in the design of residential units, these hearths shall be designed for natural gas combustion only.</td>
<td>Less than Significant.</td>
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<td>Impact AIR-3: The Project would expose persons to substantial levels of TACs, during short-term construction activities, which may lead to adverse health effects (Criterion 4).</td>
<td>Mitigation Measure AIR-3a: Implement Mitigation Measure AIR-1a (Construction Emission Controls). Mitigation Measure AIR-3b: Clean Diesel Engines for Construction Equipment. The Project Applicants shall ensure that construction contract specifications include a requirement that all off-road construction equipment used for Project improvements be equipped with a Level 3 Verified Diesel Emissions Control (VDEC), which would reduce diesel particulate emissions by at least 85 percent. This measure is included in the risks calculated in Tables 4.2-7 and 4.2-8</td>
<td>Significant and Potentially Unavoidable.</td>
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### TABLE 2-1 (Continued)
**SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

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<tr>
<td>Impact AIR-1 (cont.)</td>
<td><strong>Mitigation Measure AIR-3c: Restrict Haul Truck Routes.</strong> Haul truck contractors exporting excavated soil shall be restricted from using Mt. Diablo Boulevard as a condition of contract. Emissions from haul trucks account for approximately 27 percent of the increased cancer risk and the majority of this increase would be from trucks travelling on Mt. Diablo Boulevard. Therefore, restricting haul trucks from using Mount Diablo Boulevard to the extent feasible would further reduce the increased cancer risk.</td>
<td>Less than Significant.</td>
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<td><strong>Mitigation Measure AIR-3d: Delayed Occupancy of Residential Units.</strong> Exposure of occupants of new residential units proposed under the Maximum Mixed-Use Scenario to significant increased cancer risks from construction-related emissions shall be avoided by delaying occupancy until after the completion of demolition and excavation activities, unless the Applicant performs a new Health Risk Assessment prior to the issuance of a building permit for the residential units, demonstrating that the health risk to Project residents from the remaining demolition and excavation activities would be less than significant.</td>
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<td><strong>Mitigation Measure AIR-3e: Construction Plan.</strong> Prior to the issuance of any demolition or construction permits, Project Applicant shall prepare and provide to the City for City approval a written construction plan to minimize exposure of sensitive receptors to health risks. Such a plan shall include sufficient information as to the type, location, and duration and intensity of use of equipment so as to demonstrate that no significant health risk impacts will result during Project demolition and construction.</td>
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<td><strong>Impact AIR-4:</strong> The Project, together with anticipated cumulative development in the Bay Area Air Basin, would contribute to regional criteria pollutants (Criterion 3).</td>
<td><strong>Mitigation Measure AIR-4: Implement Mitigation Measures AIR-1a, AIR-1c, AIR-2a, and AIR-2b.</strong></td>
<td>Less than Significant.</td>
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<td><strong>Biological Resources</strong></td>
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| Impact BIO-1: The Project could negatively impact special-status wildlife species (Criterion 1). | Mitigation Measure BIO-1: The Project Applicant shall take the following steps to avoid direct losses of nests, eggs, and nestlings and indirect impacts to avian breeding success:  
- If construction activities for the Project occur only during the non-breeding season, between August 31 and February 1, no surveys shall be required.  
- During the breeding bird season (February 1 through August 31) a qualified biologist shall survey the Project Site for nesting passerine birds not more than 14 days prior to any tree removal, grading, excavation or project construction. Surveys shall include all line-of-sight trees and all vegetation within 250 feet of construction activities. If nesting passerine birds are found, the qualified biologist shall recommend measures necessary to avoid direct losses of nests, eggs, and nestlings and indirect impacts to avian breeding success, which may include construction buffer areas or seasonal avoidance.  
- Based on the results of the surveys, avoidance procedures shall be adopted, as recommended by the qualified biologist. | Less than Significant. |
| **Cultural Resources** | | |
| Impact CUL-1: The Project could result in a substantial adverse change in the significance of a historical resource (Criterion 1). | Mitigation Measure CUL-1: If prehistoric or historic-period archaeological resources are encountered during earth-moving activities, all construction activities within 50 feet must stop and the City shall be notified. A qualified archaeologist shall inspect the findings within 24 hours of discovery. Cultural resources shall be recorded on California Department of Parks and Recreation (DPR) Form 523 (Historic Resource Recordation form). If it is determined that the proposed development could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Additionally, in accordance with Public Resource Code Section 5097.993, the Project Applicant shall inform project personnel that the collection of any Native American artifact is prohibited by law. | Less than Significant. |
## TABLE 2-1 (Continued)
### SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

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<td><strong>Cultural Resources (cont.)</strong></td>
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<td>Impact CUL-2: The Project could result in a substantial adverse change in the significance of a unique archaeological resource (Criterion 2).</td>
<td>Mitigation Measure CUL-2: Implement Mitigation Measure CUL-1.</td>
<td>Less than Significant.</td>
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<tr>
<td>Impact CUL-3: The Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (Criterion 3).</td>
<td>Mitigation Measure CUL-3: A qualified paleontologist shall be present during all excavation of previously-undisturbed soils that a qualified geologist has determined are unlikely to consist of highly weathered bedrock. If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work within at least 25 feet of the find. The paleontologist shall evaluate the resource and prepare a proposed mitigation plan in conformance with SVP guidelines (1995). The proposed mitigation plan, which shall be reviewed and approved by the City, may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The applicant shall implement the recommendations of the paleontologist before construction activities can resume at the site where the paleontological resources were discovered.</td>
<td>Less than Significant.</td>
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<td>Impact CUL-4: The Project could disturb human remains (Criterion 4).</td>
<td>Mitigation Measure CUL-4: If human remains are discovered during construction, the measures specified in Section 15064.5(e)(1) of the CEQA Guidelines shall be followed, which are as follows: In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken: 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: a. The Contra Costa County coroner is contacted to determine that no investigation of the death is required, and b. If the coroner determines the remains to be Native American: i. The Coroner shall contact the NAHC within 24 hours; ii. The NAHC shall identify the person or persons it believes to be most likely descended from the deceased Native American;</td>
<td>Less than Significant.</td>
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### TABLE 2-1 (Continued)
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

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<td>Impact CUL-4 (cont.)</td>
<td>iii. The most likely descendent (MLD) may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or; 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance: a. The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 24 hours after being notified by the Commission; b. The MLD identified fails to make a recommendation; or c. The landowner or his authorized representative rejects the recommendation of the descendent, and mediation by the NAHC fails to provide measures acceptable to the landowner.</td>
<td>Less than Significant.</td>
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<tr>
<td>Impact GHG-1: Construction and operation of the Project would result in a cumulatively considerable contribution towards global climate change (Criterion 1).</td>
<td>Mitigation Measure GHG-1: The applicant shall submit for review and approval to the City of Walnut Creek a Greenhouse Gases Emissions Reduction Plan (GHG plan) containing strategies to increase energy efficiency and reduce GHG emissions from the Project to the greatest extent feasible. The applicant shall implement the approved GHG plan. The GHG plan shall include strategies that exceed those already identified in the Project Description, or required by law, and shall particularly include strategies that reduce emissions generated by motor vehicle emissions (which represent the most significant contribution to total Project GHG emissions). The following strategies were assumed in the mitigated scenario for calculation of GHG emissions after mitigation for the Maximum</td>
<td>Significant and Unavoidable.</td>
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</table>
### TABLE 2-1 (Continued)
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Mitigation Measures</th>
<th>Level of Significance after application of Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Greenhouse Gases and Climate Change</strong> (cont.)</td>
<td><strong>Impact GHG-1 (cont.)</strong></td>
<td>Less than Significant</td>
</tr>
<tr>
<td></td>
<td><strong>Commercial Scenario in Table 4.6-2:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide a ride sharing program for which 50 percent of employees are eligible;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Exceed Title 24 energy saving requirements by 20 percent;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use electrically powered landscape equipment;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Install low-flow bathroom faucets and toilets; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use Water efficient irrigation systems and landscaping.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The same strategies were assumed in the mitigated scenario for the Maximum Mixed-Use Scenario in Table 4.6-3 but also included:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Install low-flow kitchen faucets and showers; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Install energy efficient appliances (washing machines, refrigerators, dishwashers and fans)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The GHG plan shall also include, but is not limited to, adopting feasible and appropriate greenhouse gas emissions reductions strategies as set forth in the “Community Wide Reduction Measures” section of the City of Walnut Creek Climate Action Plan, which is anticipated to be adopted prior to Project approval.</td>
<td></td>
</tr>
<tr>
<td><strong>Hazards and Hazardous Materials</strong></td>
<td><strong>Impact HAZ-1:</strong> The Project could encounter contamination from past releases of hazardous materials in the area of the Project Site, such as from underground fuel storage tanks, could potentially expose residents or workers to hazardous materials or wastes (Criteria 1 and 4).</td>
<td>Less than Significant</td>
</tr>
<tr>
<td></td>
<td><strong>Mitigation Measure HAZ-1a:</strong> Any subsurface materials exposed during construction activities that appear suspect of contamination, either from visual staining or suspect odors, shall require immediate cessation of excavation activities and notification of the Contra Costa County Hazardous Materials Division. Soils suspected of contamination through visual observation or from observed odors, shall be segregated from other soils and placed on and covered by plastic sheeting and characterized for potential contamination in accordance with direction received from the Contra Costa County Hazardous Materials Division. If contamination is found to be present, any further proposed groundbreaking activities within</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 2-1 (Continued)
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Mitigation Measures</th>
<th>Level of Significance after application of Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hazards and Hazardous Materials (cont.)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact HAZ-1 (cont.)</td>
<td>Areas of identified or suspected contamination shall be conducted according to a site specific health and safety plan, prepared by a licensed professional and approved by Contra Costa County Environmental Health Division (Hazardous Materials Program).  <strong>Mitigation Measure HAZ-1b:</strong> Any groundwater generated during construction dewatering shall be contained and profiled in accordance with Regional Water Quality Control Board (RWQCB) or Central Contra Costa Sanitary District (CCCSD) requirements depending on whether water will be discharged to storm sewer or sanitary sewer. Any water that does not meet permitted requirements by these two agencies shall be transported offsite for disposal at an appropriate facility, or treated, if necessary to meet applicable standards, prior to discharge in accordance with approval from the RWQCB or CCCSD.</td>
<td>Significant and Unavoidable.</td>
</tr>
<tr>
<td><strong>Noise and Vibration</strong></td>
<td><strong>Mitigation Measure NOI-1a:</strong> To address potential nuisance impacts of Project construction, construction contractors shall implement the following:  - Signs shall be posted at all construction site entrances to the property upon commencement of Project construction, for the purposes of informing all contractors/subcontractors, their employees, agents, material haulers, and all other persons at the applicable construction sites, of the basic requirements of the Municipal Code and Mitigation Measures NOI-1a through NOI-1b.  - Signs shall be posted at the construction sites that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number in the event of problems.  - An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2-1 (Continued)
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Mitigation Measures</th>
<th>Level of Significance after application of Mitigation</th>
</tr>
</thead>
</table>
| Noise and Vibration (cont.) | Mitigation Measure NOI-1b: To reduce daytime noise impacts due to construction of the Project, the applicant shall require construction contractors to implement the following measures:  
  - Equipment and trucks used for Project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible).  
  - Impact tools (e.g., jack hammers, pavement breakers, etc.) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible.  
  - Stationary construction noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed when feasible. | Less than Significant. |
| Impact NOI-2: Traffic generated by the Project, in combination with traffic from past, present, existing, approved, pending and reasonably foreseeable future projects, could substantially increase traffic noise levels in the Project Area; and construction and operational noise levels in combination with traffic from past, present, existing, approved, pending and reasonably foreseeable future projects, could increase ambient noise levels.  
  If reasonably foreseeable future projects are constructed simultaneously with the Project, a significant cumulative noise impact could occur. | Mitigation Measures NOI-1a and NOI-1b. | Significant and Potentially Unavoidable. |
TABLE 2-1 (Continued)
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Mitigation Measures</th>
<th>Level of Significance after application of Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation and Circulation</strong></td>
<td><strong>Impact TRA-1:</strong> The Project, under both scenarios, could substantially increase hazards due to a design feature or incompatible uses (Criterion 4). <strong>Mitigation Measure TRA-1:</strong> Prior to issuance of any permit for the Project, the Project Applicant shall submit design plans that are consistent with applicable City standards.</td>
<td>Less than Significant.</td>
</tr>
</tbody>
</table>
| **Impact TRA-2:** Remediation, demolition and construction activities associated with the Project, under both scenarios, would result in temporary circulation impacts on the street system (Criteria 1, 4, and 6). | **Mitigation Measure TRA-2:** The Project Applicant and/or its contractor(s) shall prepare and implement a traffic control plan to reduce construction related traffic impacts on the roadways at, and near the work site, as well as to reduce potential traffic safety hazards and ensure adequate access for emergency responders. The Project Applicant and/or its contractor(s) shall coordinate development and implementation of this plan with jurisdictional agencies (e.g., City of Walnut Creek departments, Contra Costa County Transit Authority, Contra Costa Fire Protection Districts, etc.), as appropriate. To the extent applicable, the traffic control plan shall conform to Part 6 (Temporary Traffic Control) of the *California Manual on Uniform Traffic Control Devices* (Caltrans, 2010b), and shall include, but not be limited to, the following elements:  
  • Circulation and detour plans to minimize impacts on local road circulation during road and lane closures. Flaggers and/or signage shall be used to guide vehicles through and/or around the construction zone.  
  • Identifying truck routes designated by Contra Costa County and City of Walnut Creek. Haul routes that minimize truck traffic on local roadways shall be utilized to the extent possible.  
  • Providing sufficient-sized staging areas for trucks accessing construction zones to minimize disruption of access to adjacent public right-of-ways.  
  • Controlling and monitoring construction vehicle movement through the enforcement of standard construction specifications by on-site inspectors.  
  • Scheduling truck trips outside the peak morning and evening commute hours to the extent possible.  
  • Limiting the duration of road and lane closures to the extent possible. | Less than Significant. |
### TABLE 2-1 (Continued)
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Mitigation Measures</th>
<th>Level of Significance after application of Mitigation</th>
</tr>
</thead>
</table>
| **Transportation and Circulation (cont.)** | - Maintaining pedestrian and bicycle access and circulation during Project construction where safe to do so. If construction activities encroach on a bicycle routes or multi-use paths, advance warning signs (e.g., “Bicyclists Allowed Use of Full Lane” and/or “Share the Road”) shall be posted that indicate the presence of such users.  
- Identifying detours for bicycles and pedestrians, where applicable, in all areas where maintaining pedestrian and bicycle access and circulation during Project construction cannot be safely done.  
- Storing all equipment and materials in designated contractor staging areas on or adjacent to the worksite, such that traffic obstruction is minimized.  
- Implementing roadside safety protocols. Advance “Road Work Ahead” warning and speed control signs (including those informing drivers of state-legislated double fines for speed infractions in a construction zone) shall be posted to reduce speeds and provide safe traffic flow through the work zone.  
- Providing advance notification to administrators of police and fire stations (including fire protection agencies), ambulance service providers, and recreational facility managers of the timing, location, and duration of construction activities and the locations of detours and lane closures, where applicable. Maintain access for emergency vehicles within, and/or adjacent to, roadways affected by construction activities at all times.  
- Repairing and restoring affected roadway rights-of-way to their original condition after construction is completed.  
A copy of the traffic control plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before the commencement of construction that would partially or fully obstruct roadways. |                                                                                                                                                                                                                   |
### TABLE 2-1 (Continued)
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

<table>
<thead>
<tr>
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<th>Level of Significance after application of Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utilities and Service Systems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impact UTIL-1</strong>: The Project would result in temporary adverse effects on solid waste landfill capacity (Criterion 6).</td>
<td><strong>Mitigation Measure UTIL-1: Waste Management Plan.</strong> The Project Applicant and/or construction contractor shall prepare a waste management plan identifying the types of debris that shall be generated by the Project and the manner in which those waste streams shall be handled. In accordance with the priorities of the Waste Management Act of 1989 (AB 989), the plan shall emphasize source reduction measures followed by recycling and composting methods to reduce the amount of waste being disposed of in landfills. The plan shall specify that 100 percent of inert solids (such as asphalt, brick, concrete, dirt, fines, sand, soil, and stone) must be diverted from disposal, and that 50 percent of all other non-inert materials (wood, metal, cardboard, green waste, gypsum, fixtures, etc.) must be diverted from landfills. In addition, in order to ensure that construction waste generated by the Project does not significantly reduce the capacity of local landfills, the Project Applicant shall require contractors not to exclusively dispose of construction waste at the Acme Landfill. The plan shall be reviewed by the City of Walnut Creek, and, upon project completion, the contractor shall submit receipts to the City of Walnut Creek documenting that the stated waste reuse, recycling, and disposal goals have been met.</td>
<td>Less than Significant.</td>
</tr>
</tbody>
</table>
CHAPTER 3
Project Description

3.1 Project History and Background

Broadway Plaza opened in October 1951 with 38 stores as the Broadway-Walnut Creek Shopping Center, the second open-air shopping center in the nation. Macerich Northwestern Associates (referred to throughout as “Macerich Northwestern”), purchased most of the center in 1985. The shopping center was renamed Broadway Plaza and underwent approximately a decade of architectural enhancements, parking modifications and upgrades. A former horseshoe-shaped parking area was replaced with pedestrian pathways, shops and a restaurant, and an iconic fountain (Parcel 9). A five-level parking garage was constructed on South Main Street, and two more restaurants were later added. Finally, “Broadway Lane” was created adding boutique shops between Macy’s and Nordstrom, screening some of the parking garage on South Broadway from the pedestrian experience.

No major changes were made over the past decade (beyond tenant improvements inside buildings) until Nordstrom undertook a major renovation and façade update in late 2010. Concurrent with the Nordstrom work, development was undertaken pursuant to Measure I, an initiative the Walnut Creek voters passed in 2009. Measure I amended the General Plan, Zoning Map and Municipal Code to allow a Neiman Marcus store to be built at the northwest corner of Broadway Plaza, and to allow employee-only attendant parking in the Pedestrian Retail (PR) Zoning District.

Measure I also required several improvements as a condition to occupancy of Neiman Marcus. Macerich Northwestern is undertaking construction of these improvements, which will be completed by March 2012. Improvements are being undertaken at both driveway entrances to the shopping center along South Broadway. At the northern driveway entrance on South Broadway, these improvements include installing entry drive lane controls, pedestrian bulb-outs, necessary sidewalk and drainage improvements at all corners of the intersection to shorten the crossing distance for pedestrians, and marked crosswalks across the north and south legs of the intersections. Limitations on left turns out of the garage onto northbound South Broadway are also being instituted. At the southern driveway entrance on South Broadway, the Measure I improvements include installation of an actuated and interconnected traffic signal to facilitate turns into and out of the garage, pedestrian bulb-outs and all necessary sidewalk and drainage improvements at all corners of the intersection to shorten the crossing distance for pedestrians and to ensure signal visibility, removal of a previously-existing marked crosswalk on the north side of the intersection and installation of a new crosswalk across South Broadway on the south side of the intersection.
3. Project Description

At the intersection of South Broadway and Newell Avenue, Measure I requires restriping the southbound lane configuration on South Broadway to accommodate one left-turn lane, two through lanes, and one extended right turn lane for traffic turning westbound onto Newell Avenue.

3.2 Project Overview

The Broadway Plaza Long Range Master Plan Project (“Project”) includes a net increase of up to 300,000 gross square feet of commercial space, or a net increase of up to 400,000 gross square feet of mixed commercial and residential uses. It also anticipates demolition and reconstruction of approximately 200,000 square feet of commercial space, interior improvements, and exterior architectural improvements to the rest of Broadway Plaza.

Under this proposal, residential uses (including accessory uses) would be allowed if they are swapped for commercial square footage at the rate of 2,000 gross square feet of residential uses for every 1,000 gross square feet of commercial space it replaces. Residential uses would be capped at 200 units and 200,000 gross square feet. As a result, the Project would result in approximately 1,100,000 total gross square feet of commercial uses in Broadway Plaza, or approximately 1,200,000 total gross square feet in a combination of commercial and residential uses. Respectively, this EIR evaluates the Project buildout under two scenarios: a Maximum Commercial Scenario and a Maximum Mixed-Use Scenario. These two scenarios represent outside ranges of potential uses allowed by the Project, and are proposed to ensure that all environmental impacts are captured.

The Project’s design would incorporate gathering places and a pedestrian-friendly orientation. The Project proposes a series of internal pedestrian walkways and bike paths to allow non-vehicular movement through the site.

The Project Site includes the Broadway Plaza parcels owned by Macerich Northwestern and the parcel owned by Macy’s West Stores, Inc. (see Figure 3-1).

The Project applications include a General Plan Amendment to affect every parcel on the Project Site except Parcel 2 (which was the subject of a recent initiative, Measure I in 2009, and which includes the site of the Neiman Marcus store). The proposed changes for the remainder of the Project Site would include:

- **General Plan Category**: The Project would amend the General Plan land use category from PR (Pedestrian Retail) to MU-C (Mixed-Use, Commercial Emphasis). This General Plan Amendment would allow mixed commercial and residential uses on the Project Site.

- **Establish New FAR**: By virtue of its current PR land use category designation, the existing FAR on the Project Site is 0.75. Changing the land use category from PR to MU-C will increase the FAR to 0.85. The Project Applicants have asked to further increase the FAR on the Project Site to 0.95 for commercial uses and an FAR of 1.05 for mixed uses. These proposed FAR changes would not change to the allowable FAR at any other location.
Parcel 2 is not a part of General Plan Amendment area.
• Amend General Plan Figures: Figure 8 of Chapter 4 (Core Area FAR) of the General Plan would need to be modified to apply the 0.95 FAR for commercial uses to the Project Site, and Figure 9 (Mixed Use Floor Area Ratio) would need to be modified to apply a new 1.05 FAR for mixed commercial and residential uses to the Project Site.

Detailed characteristics of the Project are discussed further in Section 3.3.4.

The Project Applicants also seek to rezone the entire Project Site (including Parcel 2) from the Pedestrian Retail (PR) Zoning District to a new Planned Development (PD) Zoning District. The PD zoning would incorporate height limits and FAR restrictions enacted in Measure I for Parcel 2. For commercial uses, it would cap development at a 300,000 square-foot net increase over existing (resulting in approximately 1.1 million square feet total of commercial uses on the entire Project Site). For mixed commercial and residential uses at the Project Site, the PD zoning would cap development at a 400,000 square-foot net increase (resulting in approximately 1.2 million square feet total on the Project Site). Residential uses (including accessory uses) would be allowed if they are swapped for commercial square footage at the rate of 2,000 gross square feet of residential uses for every 1,000 gross square feet of commercial space replaced. Residential uses would be capped at 200 units and 200,000 gross square feet. The proposed zoning ordinance for this PD zoning District would include detailed requirements and exhibits, including parking standards and restrictions, necessary for it to function as a Master Plan for long-term development of Broadway Plaza. Design guidelines are also being proposed for the project.

The Project proposes vacation of most of Broadway Plaza street, a public street that currently runs through the shopping center, to allow for additional development potential as well as a more pedestrian-friendly configuration of the Project Site. A subdivision map, or merger and lot line adjustment, is proposed to merge the private parcels that would exist after the proposed vacation and the transfer of a portion of Broadway Plaza street resulting in two parcels that reflect the two private ownerships of the center (Macerich Northwestern and Macy’s West Stores, Inc.).

The new PD Zoning District would require that the development provide at the Project Site sufficient off-street, self-park parking spaces to satisfy the City’s standard parking requirements. Standard commercial requirements are one space per 300 square feet of net rentable floor area. Residential uses would require 1.25 spaces per studio unit; 1.5 spaces per 1 bedroom unit; 2 spaces per 2 bedroom unit; and 2.25 spaces per larger unit. All parking for Parcel 2 (Neiman Marcus and other stores) will also be provided on site, and the off-site parking approved in connection with the Neiman Marcus project would be eliminated. The Project will also replace all existing on-site public parking that would be removed as a result of the street vacation. Parking would be provided on site pursuant to a parking plan that includes both underground and above-ground parking garages. The Project also proposes an amendment to the Parcel 2 Development Agreement, and adoption of new Development Agreement(s) that would prohibit use in Broadway Plaza of the Employee-Only Attendant Parking provisions authorized by Measure I.

The Project would conform to existing General Plan building height limits, which are generally more restrictive than the height limits established by Measure A, a 1985 initiative that locked in
maximum heights at the height allowed by then-current zoning. The current General Plan height limits are depicted in Figures 3-2, 3-3 and 3-4.\(^1\)

The approximate gross square footages of the commercial space involved are shown in Tables 3-1 and 3-2, Existing and Proposed Square Footage, below.

### 3.3 Project Site and Surroundings Characteristics

#### 3.3.1 Project Site Location

The Project Site is located in the City of Walnut Creek, in central Contra Costa County (see Figure 1-1 in Chapter 1). Walnut Creek is located at the foot of Mt. Diablo, 23 miles east of San Francisco and 70 miles southwest of Sacramento. Regional access to the Project Site is provided by Interstate 680 (located approximately one mile north of the Project Site via North Main Street and one mile south of the site via South Main Street), as well as by State Route 24, (located approximately one-half mile west of the Project Site via Mt. Diablo Boulevard). The Walnut Creek Station of the Bay Area Rapid Transit (BART) system is located three-quarters of a mile north of the site. The Iron Horse Regional Trail, located approximately one-half of a mile east of the site, provides regional bicycle, pedestrian and equestrian access.

The Project Site consists of the Broadway Plaza Shopping Center. As shown in Figure 3-1, the Project Site is located in an area generally bounded by South Main Street to the west, Newell Avenue to the south, South Broadway to the East and Mt. Diablo Boulevard to the North. All property within the boundaries of these streets comprises the Broadway Plaza Shopping Center, with the exception of the parcel that has the Chico’s store at the southeast corner of South Main and Mt. Diablo, and various properties in the southwest corner of that block.

#### 3.3.2 Surrounding Areas

Immediately north of the Project Site is the Traditional Downtown area (see Figure 1-1 in Chapter 1), with commercial uses including the Broadway Pointe project. To the west, across South Main Street, are existing commercial uses. To the east, across South Broadway, is a Safeway grocery store, office buildings and the Vic Stewart’s restaurant. To the south, across Newell Avenue, are services and commercial uses in front of professional offices that extend well to the south. There is a Whole Foods market at the southwest corner of South Broadway and Newell Avenue. Kaiser Hospital and Las Lomas High School are each approximately one quarter of a mile from the site, on South Main Street. Also to the south across Newell Avenue is the north entrance (on Nursery Lane) to Las Lomas High School. The closest residential uses are approximately 300 feet east of the Project Site, on Holcolmb Court and within 650 feet to the northeast of the site.

---

\(^1\) Measure A height limits at Broadway Plaza range from 25 feet (sliver at northwest corner of S. Broadway and Newell Ave, to 40 feet (eastern parking lot behind Macy’s) to 50 feet for Nordstrom’s and all stores fronting on Broadway Plaza street, up to 60 feet for the west parking garage and stores immediately to the north (facing the horseshoe area) and then a reduction back to 35 feet for area abutting Mt. Diablo Blvd. (General Plan Draft EIR, page 29)
Macy's potential expansion area

At-grade and elevated Macy's/Garage D parking area

Potential public street vacation and transfer to private ownership

Macerich potential demolition and redevelopment area

Not a part

Figure 3-3
Conceptual Plan At Grade and Above Grade

Source: Macerich Northwestern
### TABLE 3-1
BROADWAY PLAZA MASTER PLAN EXISTING AND PROPOSED GROSS SQUARE FOOTAGE (GSF)*

<table>
<thead>
<tr>
<th>Buildings/Parcels</th>
<th>Existing (GSF)</th>
<th>Project Maximum Commercial Scenario (GSF)</th>
<th>Project Maximum Mixed-Use Scenario (GSF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Buildings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nordstrom</td>
<td>209,607</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neiman Marcus (per approved plans within Parcel 2)</td>
<td>87,605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remainder of Parcel 2</td>
<td>19,946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parcel 9</td>
<td>15,368</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parcel 1</td>
<td>80,207</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macy’s</td>
<td>183,672</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanford’s (Parcel 1)</td>
<td>8,004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macy’s Men/Juniors (Parcel 1)</td>
<td>70,206</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Stores (Parcels 1 and 4)</td>
<td>115,806</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodyear Tire Store (Parcel 7A)</td>
<td>6,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Existing</td>
<td>796,421</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Approximate Maximum Potential Demolition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanford’s (Parcel 1)</td>
<td>8,004</td>
<td>8,004</td>
<td></td>
</tr>
<tr>
<td>Macy’s Men/Juniors (Parcel 1)</td>
<td>70,206</td>
<td>70,206</td>
<td></td>
</tr>
<tr>
<td>Interior Stores (Parcels 1 and 4)</td>
<td>115,806</td>
<td>115,806</td>
<td></td>
</tr>
<tr>
<td>Goodyear Tire Store (Parcel 7A)</td>
<td>6,000</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>Total Demolition</td>
<td>200,016</td>
<td>200,016</td>
<td></td>
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<tr>
<td><strong>Existing Buildings To Remain</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nordstrom</td>
<td>209,607</td>
<td>209,607</td>
<td></td>
</tr>
<tr>
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<tr>
<td>Parcel 1</td>
<td>80,207</td>
<td>80,207</td>
<td></td>
</tr>
<tr>
<td>Macy’s</td>
<td>183,672</td>
<td>183,672</td>
<td></td>
</tr>
<tr>
<td>Total Existing to Remain</td>
<td>596,405</td>
<td>596,405</td>
<td></td>
</tr>
<tr>
<td><strong>Potential New Construction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Commercial Shop space on Macerich</td>
<td>437,000</td>
<td>337,000</td>
<td></td>
</tr>
<tr>
<td>Northwestern-owned parcels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macy’s Expansion</td>
<td>57,000</td>
<td>57,000</td>
<td></td>
</tr>
<tr>
<td>Replacement of Goodyear Tire Store square footage</td>
<td>6,000</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>New Residential</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total New Construction</td>
<td>500,000</td>
<td>400,000(^a)</td>
<td></td>
</tr>
<tr>
<td>TOTAL NET NEW COMMERCIAL/RETAIL(^b)</td>
<td>299,984</td>
<td>199,984(^b)</td>
<td></td>
</tr>
<tr>
<td>TOTAL NET NEW RESIDENTIAL</td>
<td>0</td>
<td>200,000(^c)</td>
<td></td>
</tr>
<tr>
<td>TOTAL PROJECT BUILD-OUT(^d)</td>
<td>1,096,405</td>
<td>1,196,405</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Does not include garage square footages.

* As explained earlier, this table presents two potential scenarios that are intended to reflect overall maximum development potential for commercial and mixed uses. This table therefore presents an illustrative distribution of new square footage among the various parcels, and not an exact development program.

\(^{a}\) Excludes residential use area

\(^{b}\) Total New Construction minus Total Demolition

\(^{c}\) 200 dwelling units at average 1,000 gsf per unit

\(^{d}\) Total New Construction plus Total Existing to Remain
TABLE 3-2
BROADWAY PLAZA EXISTING AND PROPOSED PARCELS
GROSS SQUARE FOOTAGE (GSF)

<table>
<thead>
<tr>
<th>Land Areas</th>
<th>Existing (GSF)</th>
<th>Project Maximum Commercial Scenario (GSF)</th>
<th>Project Maximum Mixed-Use Scenario (GSF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel 1</td>
<td>228,604</td>
<td>228,604</td>
<td>228,604</td>
</tr>
<tr>
<td>Parcel 3</td>
<td>99,657</td>
<td>99,657</td>
<td>99,657</td>
</tr>
<tr>
<td>Parcel 4</td>
<td>133,742</td>
<td>133,742</td>
<td>133,742</td>
</tr>
<tr>
<td>Parcel 5</td>
<td>12,466</td>
<td>12,466</td>
<td>12,466</td>
</tr>
<tr>
<td>Parcel 6</td>
<td>8,671</td>
<td>8,671</td>
<td>8,671</td>
</tr>
<tr>
<td>Parcel 7</td>
<td>89,657</td>
<td>89,657</td>
<td>89,657</td>
</tr>
<tr>
<td>Parcel 8</td>
<td>73,312</td>
<td>73,312</td>
<td>73,312</td>
</tr>
<tr>
<td>Parcel 9</td>
<td>39,748</td>
<td>39,748</td>
<td>39,748</td>
</tr>
<tr>
<td>Subtotal Macerich Northwestern parcels (not including Parcel 2)</td>
<td>685,857</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parcel 2</td>
<td>67,817</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Macerich Northwestern parcels</td>
<td>753,674</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macy's West Stores, Inc. Parcel 7A</td>
<td>301,652</td>
<td>301,652</td>
<td>301,652</td>
</tr>
<tr>
<td>Total Broadway Plaza</td>
<td>1,055,326</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximate area of proposed street vacation</td>
<td>73,000</td>
<td>73,000</td>
<td>73,000</td>
</tr>
<tr>
<td>Total Broadway Plaza including street area</td>
<td>1,128,326</td>
<td>1,060,509</td>
<td>1,060,509</td>
</tr>
</tbody>
</table>

a As explained earlier, this table presents two potential scenarios that are intended to reflect overall maximum development potential for commercial and mixed uses. This table therefore presents an illustrative distribution of new square footage among the various parcels, and not an exact development program.

Project Site, on Alta Vista. Additional residential uses are in the Alma Park neighborhood off of South California Boulevard, three blocks west of the Project Site. There are also several apartment and condominium projects on the hills east of South Broadway, which provide a buffer for single family neighborhoods further east.

3.3.3 General Plan, Zoning and Redevelopment Plan Context

The Project Site is located within an area designated on the Walnut Creek’s General Plan Land Use map as the Core Area. The Core Area is a central district that is urban in character, with approximately 8.4 million square feet of intensive regional- and local-serving commercial uses, including retail, office, service and ancillary uses, as well as mixed-use and high density residential development. The Core Area is roughly bounded by Walden Road on the north, the Interstate 680/South Main Street interchange on the south, Interstate 680 on the west and the Iron Horse Regional Trail on the east. The Core Area is the economic and cultural center of the city and of central Contra Costa County.

At the center of the Core Area is an 18-block shopping, dining and entertainment area depicted in the General Plan as the Pedestrian Retail Land Use District. According to local brokers, downtown Walnut Creek has roughly 2.5 million square feet of commercial space.2

2 John Cumbelich Quarterly Downtown Retail Survey and Occupancy Report.
3. Project Description

With respect to zoning, the Project Site is located within the Pedestrian Retail District, which is bounded generally by Civic Drive, Newell Avenue, California Boulevard and Broadway (see Figure 1-1 in Chapter 1). The Pedestrian Retail District is composed of two distinct areas: the Traditional Downtown/North of Mt. Diablo area and the Broadway Plaza/South of Mt. Diablo area. The Traditional Downtown is located along Locust and North Main Streets, south of Civic Drive and north of Mt. Diablo Boulevard. It is characterized by a regular grid street pattern, small parcels, higher densities, small scale development, old buildings, few surface parking lots, generally continuous retail frontages, smaller locally-owned businesses, mature street trees, and sidewalk seating. The Broadway Plaza/South of Mt. Diablo area, which includes the Project Site, is characterized by a more irregular street pattern, larger parcels, newer and larger-scale development, parking structures, and a significant percentage of national retailers.

The eastern portion of the Project Site was within the boundaries of the South Broadway Redevelopment Area, but that redevelopment plan expired by its own terms in October 2011.

3.3.4 Existing Project Site Characteristics

3.3.4.1 Development, Tenants and Ownership

Broadway Plaza is a regional shopping center which contains Nordstrom, Macy’s, Macy’s Men/Juniors, Neiman Marcus, Crate & Barrel, David M. Brian, and another 75 to 80 leading national retailers, specialty shops, services, restaurants and cafes. Broadway Plaza has an open air format with several in-line and free-standing buildings of various sizes. The Project Site (Broadway Plaza) consists of Parcels 1, 2, 3, 4, 5, 6, 7, 7A, 8, 9, and Broadway Plaza street (see Figure 3-1). The total Project Site area is approximately 25 acres.

The majority of the Project Site (approximately 72 percent of the privately owned land in Parcels 1, 2, 3, 4, 5, 6, 7, 8 and 9) is owned by Macerich Northwestern. The remainder of the privately owned portions of Broadway Plaza (Parcel 7A, which consists of Macy’s Women’s department store, the Goodyear tire store, and the Macy’s Garage, described below) is owned by Macy’s West Stores, Inc. The Neiman Marcus store on Parcel 2 opened in March 2012. With the completion of Neiman Marcus, Broadway Plaza has just under 800,000 gross square feet of commercial space, with over 600,000 square feet of that space in six stores: Nordstrom (on Parcel 3), Macy’s (on Parcel 7A) and Macy’s Men/Juniors (on Parcel 1), Neiman Marcus (on Parcel 2), Crate & Barrel (on Parcel 1) and David M. Brian (on Parcel 1). Figure 3-1 presents the Project Site plan of Broadway Plaza depicting the land ownership.

The Project Site currently contains more than two dozen buildings dating back to the early 1950s. With some exceptions, most buildings fronting on public streets are built to the property lines with no setback. There are several approved encroachments for canopies, overhangs and other pedestrian-friendly elements.

3 (The area of the Project Site does not depend on which portions of the Project are approved. The entire area encompassed within the applications is the “Project Site.”) Parcel 1A lies within the South Main Street right-of-way and although a legal parcel owned by Macerich Northwestern is not included in the Project Site area, will be dedicated to the City and is excluded from the scope of the General Plan Amendment and zoning change requests.
The Project Site also contains Broadway Plaza street, a two-lane public road that is owned in fee by the City, and that has approximately 63 metered on-street parking spaces, one commercial loading space, and one pedestrian loading space. This street has taken on varying alignments since its original construction in the early 1950s, and is currently located as depicted in Figure 3-1. It generally runs north/south, provides service access to Neiman Marcus and Macy’s and has limited connections for automobiles to access the five-story parking garage along South Main Street and/or the Macy’s parking garage. It is signalized at the south end where it terminates at South Main Street. Its northern end terminates at Mt. Diablo Boulevard, with a stop sign and right-only turns into and out of Broadway Plaza street. A crosswalk, with in-ground lighting triggered by pedestrians, extends north across Mt. Diablo Boulevard to Broadway Pointe, another commercial complex.

A small parcel at the northern boundary of the Project Site, located between Parcel 2 and Mt. Diablo Boulevard, currently houses a Chico’s store. That small parcel is not owned by Macerich Northwestern nor Macy’s West Stores, Inc., and is not part of the Project Site (see Figure 3-1). Similarly, a parcel to the south of Parcel 1 and the west of Parcel 7A, which houses La Boulange and was formerly occupied by Bing Crosby’s Restaurant and Piano Bar, is not owned by an applicant and is not part of the Project Site (see Figure 3-1). The parcel at the northeast corner of Newell Avenue and South Main Street, which houses Chase Bank, is likewise not part of the Project Site.

There is a fountain and gathering space located near the north end of the Project Site, on Parcel 9 near the existing Broadway Plaza street. There are trees on the Project Site and street trees within the public right-of-way along the three street frontages of the Project Site. Minor landscaping areas exist throughout the Project Site. The Project Site also has existing loading docks and trash/recycled material enclosures to support the existing uses.

**3.3.4.2 Creeks and Culverts**

Two creek easements cross the Project Site. Las Trampas Creek extends from west of South Main Street beneath Broadway Plaza within an underground box culvert that is 50 feet wide and 25 feet deep. The culvert underlies Parcels 1, 9 and 2. Las Trampas Creek continues underground beneath Mt. Diablo Boulevard to its confluence with San Ramon Creek to create Walnut Creek beneath Liberty Bell Plaza, a City public plaza/park adjacent to Broadway Pointe at the northwest corner of South Broadway and Mt. Diablo Boulevard. San Ramon Creek enters the Project Site at Newell Avenue as an open channel, and converts to a 50-foot by 25-foot underground box culvert at Macy’s. It extends through Parcels 7A, 4, 5, 6 and 3 of the Project Site under the Macy’s store, the existing two-level parking garage and Nordstrom (see Figure 3-1). San Ramon Creek then crosses under Mt. Diablo Boulevard to join Las Trampas Creek and become Walnut Creek under Liberty Bell Plaza.

**3.3.4.3 Parking**

The site has three parking garages (two of which function as one) (see Figure 3-2 and explanation below):
3. Project Description

- A five-story garage is situated next to South Main Street at the easterly terminus of Botelho Avenue, in Parcel 1, and accessed from a signalized driveway on South Main Street. The garage has approximately 750 off-street parking spaces. As a result of Measure I, a former entrance from the south side of that parking structure was recently closed and the 38-space parking lot behind Macy’s Men/Juniors store revised.

- A two-story parking garage containing approximately 575 off-street spaces is situated along South Broadway, on Parcels 5, 6, 7 and 8, with two main driveway entrances along South Broadway (the north driveway entrance and the south driveway entrance). This garage is commonly called the Nordstrom Garage. The five-story garage and the Nordstrom Garage are owned and operated by Macerich Northwestern.

- The third garage is a two-story garage owned and operated by Macy’s West Stores, Inc., and is commonly called the Macy’s Garage. The Macy’s Garage is east and southeast of Macy’s, on Parcels 7A and 8. The most easterly approximately 140 feet of the site of the Macy’s Garage lies on Parcel 8, which is owned by Macerich Northwestern, the remainder of the site is on Parcel 7A, which is owned by Macy’s West Stores, Inc. This third garage contains approximately 1,175 off-street parking spaces, with approximately 300 of those spaces on land owned by Macerich Northwestern. The third garage is accessed from a signalized driveway on Newell Avenue and from the southern driveway on South Broadway.

The two-story garages connect seamlessly with each other at the South Broadway southern driveway, and access to each of the two-story garages is available from the other two-story garage.

Macy’s West Stores, Inc. owns another surface parking lot with approximately 50 spaces on Parcel 7A, near the Macy’s store. It is accessed from a signalized driveway on Newell Avenue and from the southern driveway on South Broadway.

There are approximately 14 surface spaces at the northeast corner of the Project Site, near the Nordstrom store, on Parcel 7, that have a small driveway entrance on South Broadway, near the intersection of South Broadway and Mt. Diablo Boulevard. In addition, the City has approved off-site parking to accommodate the expansion that encompasses Neiman Marcus, which will be in use by March 2012.

3.3.5 Project Characteristics

3.3.5.1 Range of Development Types and Uses

The Project proposes a flexible development plan that would allow all-commercial uses, or a mix of commercial and residential uses. This flexibility is designed to allow the shopping center to be responsive to market needs and development trends. The net new square footage studied as the Project in this EIR would be subject to the following limitations on the maximum amount of allowed development within the Project Site boundary:

- The maximum net increase in commercial uses would be 300,000 gross square feet.
3. Project Description

- Residential uses would be allowed if they are swapped at the ratio of 2,000 square feet of residential uses for every 1,000 square feet of foregone commercial uses, which would result in a maximum net increase of 400,000 gross square feet for mixed residential and commercial uses. Residential uses would be limited to 200 units and 200,000 gross square feet. The bedroom make-up of the residential units will vary, but will be limited to three-bedrooms.

As shown in Table 3-1, the Project would result in approximately 1,100,000 gross square feet of commercial space throughout Broadway Plaza; or approximately 1,200,000 gross square feet of mixed residential uses and commercial uses, with up to 200 residential units. Any development would be configured in buildings that would comply with the current height limitations of the General Plan. (See Figures 3-2, 3-3 and 3-4 for General Plan height limitations.) The new development (excluding garages) would be a maximum of approximately 500,000 (300,000 net new maximum) gross square feet of commercial uses, or a maximum of approximately 600,000 (400,000 net new maximum) gross square feet of mixed residential and commercial uses.

The commercial development would generally be configured in buildings of one to two stories above grade; an anchor tenant store may be higher. The mixed-use development could consist of residential development on floors above the commercial uses, with residential development potentially extending to the upper height limits.

The commercial uses proposed to be permitted in the Project are uses that are currently encompassed within the Pedestrian Retail (PR) General Plan land use category and zoning district. The Project would add multi-family residential uses, and accessory and temporary uses typically allowed with multi-family residential uses. Accessory uses may include leasing areas, health facilities, swimming amenities, interactive play space for children, and meeting/clubhouse rooms. Several plazas and common open spaces are contemplated, including a primary gathering space large enough to accommodate summer concert events and winter events.

The targeted area for new development/redevelopment is on Parcels 1, 4, 5, 6, 7, 7A, and 8. However, new square footage may be added anywhere within the Project Site subject to the proposed FAR limits and all other existing development regulations including height limits. All buildings within the Project Site would be subject to interior tenant improvements, cosmetic upgrades and façade improvements.

As previously described, for the purpose of analyzing the environmental impacts of the Project, the EIR evaluates the Project buildout under two scenarios: a Maximum Commercial Scenario and a Maximum Mixed-Use Scenario. These two scenarios represent outside ranges of potential uses allowed by the Project, and are proposed to ensure that all environmental impacts are captured. Conceptual depictions of how the Maximum Commercial and Maximum Mixed-Use Scenarios might be built out are shown in Figures 3-3 and 3-4.

3.3.5.2 Project Floor Area Ratios

Through a General Plan Amendment, the FAR for most of the Project Site would be increased from 0.75 to 0.95 for commercial uses and an FAR of 1.05 would be established for mixed
commercial and residential uses. The exception is that Parcel 2 (currently occupied by Neiman Marcus, Cole Haan, Sun Glass Hut, Swarovski, Betsey Johnson, Sur La Table, and PF Chang) would remain at an FAR of 1.75 as required by Measure I. Because the 1.75 FAR was set by voter initiative, it cannot be altered by the City Council. The Project proposes to address the FAR only for the remainder of the Project Site, and amend the General Plan to set the FAR limit for that area for commercial uses at 0.95. The Project also proposes to amend the Mixed Use Commercial Emphasis land use category to increase the maximum FAR for the commercial component of a mixed used project from 0.85 to 0.95. The only site in Walnut Creek proposed for application of the new 0.95 commercial FAR and the new 1.05 mixed use FAR is the Project Site. Thus, the existing FAR limitations in place for other parcels designated MU-C will not be increased.

Together, the FAR of 1.75 on Parcel 2, and the FARs proposed by the Project for the rest of Broadway Plaza, would permit slightly more than 1,100,000 square feet of commercial uses or slightly more than 1,200,000 square feet of mixed commercial and residential uses on the Project Site. However, the proposed PD zoning district would limit net new development to 300,000 square feet of commercial or 400,000 square feet of mixed uses, and would limit maximum square footage within the Project Site to slightly less than 1.1 million square feet of commercial uses or slightly less than 1.2 million square feet of mixed uses. If the street vacation is approved, the vacated portion of the public street would be transferred to private ownership and its square footage would be included in the FAR calculations.

### 3.3.5.3 Parking Plan

The Project proposes to provide off-street, self-parking according to standard City requirements. Standard City requirements mandate 1 parking space per 300 square feet of rentable floor area for all permitted uses within the Pedestrian Retail Zoning District. This standard will be continued under the proposed PD zoning as well. This Project proposes to include adequate onsite parking for Neiman Marcus as well, and would eliminate the off-site parking approved in connection with the Neiman Marcus project. Residential uses would require 1.25 spaces per studio unit; 1.5 spaces per 1 bedroom unit; 2 spaces per 2 bedroom unit; and 2.25 spaces per larger units in accordance with current City standards. The actual number of parking spaces required will depend upon the amount and type of space constructed under the development plan. The discussion below accordingly focuses on the approximate numbers of spaces that could be provided in each garage. The proposed PD zoning district would require enough self-parked, parking spaces that are not tandem or stacked to satisfy City requirements. A Development Agreement would specify that the Employee-Only Attendant Parking authorized by Measure I for the entire Pedestrian Retail Zoning District could not be used in the new PD Zoning District. Any displaced public parking stalls lost as a result of the street vacation will also be replaced in the new garages.

The Project would improve the intersection to provide queuing capacity on South Main Street for southbound vehicles turning left onto Broadway Plaza street for a total queuing capacity of fourteen vehicles. In addition, the Project would also improve the intersection to provide queuing capacity on South Broadway for northbound vehicles turning left into Garage C for a total
queuing capacity of fourteen vehicles. No traffic lanes would be lost to complete either improvement.

As explained below (see Demolition and Construction), during the construction period, as new space is constructed on site, and under a worst-case scenario, up to 450 spaces may need to be provided offsite for customers and/or employees, in addition to up to 100 spaces for construction workers during construction.

In describing the parking structures, the EIR uses the following terms to refer to levels. The underground or basement levels are the levels that would lie underneath finished grade. The first above-ground levels would be at street level, and would be at the same elevation as first floor commercial space. The second above-ground levels would be one floor above the street level, and would be at the same elevation as second floor commercial or residential space. The third above-ground level would be developed only in areas permitted by the existing the General Plan height limitations, and would be above second floor parking or commercial tenants.

The conceptual parking plans for the Maximum Commercial Scenario and Maximum Mixed-Use Scenario are depicted in Figures 3-3 and 3-4. The small number of surface parking spaces (approximately 14) at the northeast corner of the Project Site, near the Nordstrom store, would remain, and would provide parking for service and delivery vehicles.

There would be four parking structures, described below.

**Garage A (Five-Level Garage On South Main)**

The existing five-story parking garage on Parcel 1, referred to as Garage A, will remain. Its existing entrance from South Main Street would be unaffected. This garage has approximately 750 off-street parking spaces.

**Garage B (Central Underground Garage)**

The Project proposes a new underground parking garage, labeled Garage B, which would be located on Parcels 1 and 4, under the commercial uses in the middle of the site, between the two underground culverts that run through the site (see Figure 3-4). Garage B would have up to approximately 650 parking spaces. Escalators, stairs and elevators would be distributed throughout Garage B, allowing customers who park underground access to several points near the center of the Project Site. Vehicular access to this underground parking garage would be provided off of South Main Street via a ramp to be constructed at a new cul-de-sac that would be located at the south end of what is now Broadway Plaza street.

**Garage C (Four Level Garage on South Broadway)**

The two-story garage currently owned and operated by Macerich Northwestern (commonly called the Nordstrom Garage) would be demolished, and replaced with a new garage, Garage C. Garage C would have an underground level and extend up to three levels above ground, where permitted by the General Plan’s height limits. Garage C would occupy the eastern edge of the Project Site,
on all or portions of Parcels 4, 5, 6, 7 and 8. It would extend from Nordstrom (Parcel 3) south to Newell Avenue on land owned by Macerich Northwestern, and would include land currently occupied by a portion of the existing Macy’s Garage.

The configuration of the above-ground levels of Garage C would depend upon the uses made of the Project Site. Under the Maximum Commercial Scenario, the first and second above-ground levels of the garage would be all parking, and only a limited amount of parking on the third above-ground level would be needed to meet parking needs. Under the Maximum Mixed-Use Scenario, the first above-ground level would contain commercial uses, while the second and third above-ground levels would have parking. More parking would be provided on the third above-ground level under the Maximum Mixed-Use Scenario than under the Maximum Commercial Scenario.

In both scenarios, the second above-ground floor of Garage C would be at the same elevation as any second floor entrances to commercial space that are adjacent to Garage C (including Nordstrom’s existing second level walkway), allowing ADA-compliant direct access to second floor buildings that connect with Garage C.

Depending upon the final development configuration, Garage C would have up to approximately 1,250 off-street parking spaces, of which approximately 400 would be underground. Garage C would have access from the South Broadway driveway, at the signal and the northern driveway from South Broadway would be closed to vehicular traffic. This garage would connect with Garage D, thus providing access from the Newell Avenue driveway as well.

**Garage D (Macy’s Parking Structure)**

The two-story parking structure owned by Macy’s West Stores, Inc. in the southeast corner of the site would be demolished and replaced with a new structure, called Garage D, that would be located on Parcel 7A, and that would have up to three above-ground levels. The Project does not propose underground parking in Garage D (though the Extra Parking Alternative, discussed in Chapter 5 of this Draft EIR, considers underground parking in Garage D). The second above-ground level of Garage D would be at the same elevation as second floor entrances to Macy’s allowing Americans with Disabilities Act (ADA) compliant, direct access to Macy’s second floor. In areas subject to the General Plan’s 35-foot height limitations, there would be a third above-ground level of parking. There would be no third above-ground level in the southeastern-most corner, which is subject to a 25-foot height limitation. Garage D would provide up to approximately 850 off-street parking spaces.

Garage D would be accessed from the driveway on Newell Avenue. It would also be accessed by the southern driveway on South Broadway (which is being signalized pursuant to Measure I), connecting to Garage C. This essentially continues the practice of cross-property shared parking in decks that, to the user, appear as a single parking facility with multiple points of access.
3.3.5.4 Green Design Elements (Building, Stormwater, Alternative Transportation)

The Project will be required to comply with Title 24, which contains green building design requirements. Efficient design criteria are expected to result in a more efficient use of energy while reducing water demand and wastewater production.

Compliance with stormwater requirements will ensure the Project will provide full treatment of surface runoff.

The Project would result in no substantial change in the amount of impervious surfaces on the Project Site. Through runoff treatment, the Project would reduce direct runoff to the San Ramon and Las Trampas Creek culverts.

The Project would emphasize alternative transportation by providing amenities for bicycle riders and pedestrians, as noted in the following section. The Project would also promote public transit. It includes providing transit opportunities to replace the public transit route that would be lost due to potential vacation of a portion of Broadway Plaza street. The Project would provide in kind transit opportunities in terms of transit visibility, its proximity to commercial uses, the visual and physical quality of transit stops, and ease of transit use. The Project would not result in an increase to the existing headways (the time between transit vehicles).

3.3.5.5 Creeks Restoration and Trail Plan Implementation

The Project addresses elements of the City’s Bicycle Plan relative to the site and will enhance bicycle connectivity to regional bike routes. The Project proposes pedestrian and bike connections along South Broadway and Newell (in the existing sidewalk area and within the setback area of the Project Site), and along the creek edge and into the Project Site using the existing bridge over San Ramon Creek.

3.3.5.6 Architectural Design

The proposed PD Zoning District would include development regulations. The Project Applicants also propose the adoption of design standards for the Project Site. Buildings would be required to incorporate functional design attributes that are state of the industry for commercial and restaurant uses. These standards would dictate a much more pedestrian-friendly design than exists today, with proximate and convenient parking and more disability friendly access points included. Gathering spaces, paseos and pocket park areas would be included, to be the primary form of circulation within the center. The standards would dictate more extensive use of outdoor gathering and dining spaces. They would also focus on connectivity to existing and planned trail and bicycle routes, as well as transit-friendly points of access to optimize multi-modal access to the center. The regulations would also address the location of trash and recycling equipment, trash compactors, heating, ventilating and air conditioning (HVAC) units, communications and other equipment, and would require that this equipment meet state of the industry standards, in keeping with the green efficiency standards established under the California Building Code. In this vein, to the extent
fireplaces might be installed at the Project, any such units would be natural gas burning. All development would be required to comply with applicable height limit policies, building code requirements, and City noise standards.

3.3.5.7 Infrastructure

The Project will provide infrastructure sufficient for necessary utility services to the new development. Existing backbone underground lines currently located under Broadway Plaza street would be moved, as permitted by utility-providers, to new pedestrian walkways or trail locations, generally between the two existing box culverts within the Project Site and in areas that are slated for other construction activity. There are two utility corridor options between the culverts. One corridor would entail moving the utilities 20 to 50 feet; the other corridor would require a move of approximately 150 feet. In either event, the utilities would continue to be located between the box culverts, reconnecting to their extensions near Nordstrom and near the South Main Street/Broadway Plaza street intersection.

The Project Site will be served by emergency vehicle access (EVA) routes, which will be built to meet all EVA requirements.

3.3.5.8 Street Vacation and Cul-de-Sacs

The Project proposes that most of Broadway Plaza street, a public street that traverses the Project Site be vacated and transferred to private ownership to allow the Project additional development potential and to incorporate a more pedestrian-friendly design. The area that would be vacated extends from near the primary entrance to Nordstrom (near the mid-points of Parcel 2 and Parcel 3) to the primary entrance to Macy’s (near the southern end of Parcel 1). Cul-de-sacs would be created at either end of the street, near the front entry of Nordstrom and the drive entry to Stanford’s Restaurant (the southern end of Parcel 1). These cul-de-sacs would preserve loading, service, and existing access points. In addition, the cul-de-sac near Stanford’s would lead to a ramp that provides vehicular access to the proposed below-grade Garage B (see Figure 3-4).

3.3.5.9 Demolition and Construction

The flexibility inherent in the Project does not permit a detailed projection of the development schedule or phasing. The EIR assumes that development would be compressed into a single phase, which presents the most intensive level of development activity and thus ensures a conservative analysis of environmental impacts.

Demolition and grading are projected to occur between January and November 2014. Overall, a single phase project would take two and one-half to three years to complete, including demolition.

The Project includes demolition of both of the existing two-story parking garages (the Nordstrom Garage and the Macy’s Garage). These structures were built in the 1960s. The Project also includes demolition of existing commercial space. The maximum amount of existing commercial square
footage that could be demolished is as shown in Table 3-1, and includes all buildings on Parcel 4 (all buildings between Nordstrom and Macy’s on the east side of Broadway Plaza street), buildings on Parcel 1 that are located between Broadway Plaza street and the Las Trampas culvert (from the fountain area over to Stanford’s on the west side of Broadway Plaza street), and the Goodyear tire store on Parcel 7A. These buildings are generally 60 years old, though the current Macy’s Men/Juniors store was built in the early 1970s and expanded in the 1990s. (See Figure 3-4.)

Construction equipment and materials staging would be accommodated on the Project Site. Temporary lane closures and occasional street closures may be necessary, particularly during the delivery of heavy equipment. Travel routes for employees, demolition export and heavy equipment transport would be determined in consultation with City staff and scheduled to avoid peak traffic periods.

There would be an estimated maximum of 500 construction employees on the site at any one time under the compressed development schedule. Parking for construction workers would be located in existing Broadway Plaza parking facilities or offsite locations within reasonable walking or transit distance of the Project Site.

Up to four demolition excavators could be used to break down the existing structures on the Project Site. Demolition and excavation debris would be removed from the site during the 11-month demolition and excavation stage. Up to two cranes would be assembled and used on the site during the construction phase. There would be no pile driving.

Estimated amounts of on-haul and off-haul are as set forth in Table 3-3. These estimates assume 18-wheel dump trucks.

The peak number of deliveries during construction would occur during concrete pours. There would be up to 100 delivery trucks arriving on the site per day, approximately two days per week during an anticipated 12-month period. Work trucks would also bring materials to the site.

### 3.3.5.10 Operation of the Project

Store hours for Broadway Plaza retailers will be similar to existing hours of Monday through Friday 10:00 a.m. to 9:00 p.m., Saturday 10:00 a.m. to 8:00 p.m. and Sunday 11:00 a.m. to 7:00 p.m. Occasional special or seasonal events within the open space plaza areas are also contemplated to continue. Shopping hours likely would be extended during the holiday season, similar to the current practice. Residential portions of the Project would be continuously accessible to the residents.

### 3.3.5.11 Development Agreement

The Project applications include a request for a Development Agreement that will vest the approvals granted for the Project, with an initial proposed term of ten years, with two five-year extensions.
### TABLE 3-3
**DEMOLITION AND CONSTRUCTION EXPORT**

<table>
<thead>
<tr>
<th>Approximate Maximum Amounts in Cubic Yards (Truck Trips)</th>
<th>Approximate Maximum Subtotals and Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete from garage demolition – Nordstrom Garage</td>
<td>15,000 (750)</td>
</tr>
<tr>
<td>Concrete from garage demolition – Macy’s Garage</td>
<td>18,000 (900)</td>
</tr>
<tr>
<td>Portion of above concrete to be reused on site</td>
<td>-9,000 (-450)</td>
</tr>
<tr>
<td>Total net concrete export from garages</td>
<td>24,000 (1,200)</td>
</tr>
<tr>
<td>Soils export from garage construction</td>
<td>183,000 (9,150)</td>
</tr>
<tr>
<td>Demolition debris from commercial building demolition</td>
<td>35,000 (1,750)</td>
</tr>
<tr>
<td>Spoils export from site demolition and utility relocation</td>
<td>5,000 (250)</td>
</tr>
<tr>
<td>Total net demolition and soils export from commercial buildings and utility relocation</td>
<td>40,000 (2,000)</td>
</tr>
</tbody>
</table>
| **Total Export**                                         | **247,000 (12,350)**

### 3.4 Project Goals and Objectives

The Walnut Creek General Plan contains many goals, policies and action items that promote redevelopment of Broadway Plaza. These include:

- Promote Walnut Creek as a regional shopping destination;
- Enhance the success of downtown businesses, support a balanced expansion of specialty retail;
- Plan for adequate sites that allow for expansion of Walnut Creek businesses;
- Encourage the development of, maintenance of, and connectivity between high-quality public spaces in the Core Area;
- Maintain and enhance Walnut Creek’s thriving Core Area while keeping the Pedestrian Retail District lively and walkable;
- Enhance the attractiveness and character of the City’s urban design and quality of the Core Area and its subareas;
- Support infill and redevelopment in existing urban areas;
- Encourage diverse housing options, including mixed-use, higher-density developments;
- Enhance and improve the vitality of Broadway Plaza.

The project objectives are to maximize implementation of these goals, policies and objectives by expanding Broadway Plaza in a manner that achieves the following targets:
3. Project Description

- Develop a plan for Broadway Plaza that could accommodate demands for commercial and/or multifamily development over the long term, avoiding isolated, piecemeal redevelopment projects.

- Create opportunities for residential uses at a location close to public transit, entertainment, shopping and businesses.

- Maintain the position of Broadway Plaza and downtown Walnut Creek as the premier shopping and dining location in the East Bay over the long term by concentrating development in the Core Area, and by creating flexibility in uses and design that allows a property owner to respond to market demands as they develop over the long term.

- Promote long-term flexibility by adopting a plan for Broadway Plaza that enables each property owner to provide the required amount of parking on its own property, without complicated or cumbersome parking sharing easements.

- Redesign Broadway Plaza in a manner which emphasizes pedestrian use and de-emphasizes automobile use.

3.5 Potential Public Agency Approvals

This EIR is intended to provide the information and environmental analysis necessary to assist the City in considering all the approvals and actions necessary to adopt the Broadway Plaza Long Range Master Plan. The following actions may be taken by the City for adoption of the Project:

- **Certification of the EIR.** Certify this EIR and its environmental findings pursuant to CEQA.

- **General Plan Amendment.** Amend the General Plan to change the General Plan Land Use Map and the land use designation from Pedestrian Retail (PR) to Mixed-Use, Commercial Emphasis (MU-C) and modify the maximum FAR applicable to portions of the Project Site.

- **Planned Development Zoning Ordinance.** Amend the Zoning Ordinance to reclassify the Project Site as a new Planned Development (PD) zoning district.

- **Design Review Guidelines.** Approve design review guidelines specific to the Project Site.

- **Development Agreement.** Approve a new Development Agreement to specify that the Employee-Only Attendant Parking authorized by Measure I could not be used under the new PD zoning district, to provide public benefits, and to vest the approvals granted for the Project, with specific timeframes.

- **Design Review Approval.** Approve the design and scale of the proposed new and expanded buildings.

- **Tentative Map.** Approve a Subdivision Map or Merger and Lot Line Adjustment to merge all Macerich-owned parcels.

- **Vacation of Right-of-Way.** Approve a vacation of Right-of-Way to close Broadway Plaza street to traffic and convert it to a pedestrian thoroughfare.
• **Tree Removal Permit.** Permit the removal of trees on the Project Site to accommodate the construction of new and expanded buildings.

• **Stormwater Pollution Prevention Plan.** Approve a Stormwater Pollution Prevention Plan for construction activities.

The Project may also require review and/or approvals by other local, state, and federal agencies that may have discretionary approval over aspects of the Project.

• **Approval of work near the culverts.** Approval of construction work near the area of the culverts may be required from County Flood Control, the Regional Water Quality Control Board and/or California Department of Fish and Game.

• **Review and approval of engineering work near the culverts.** The US Army Corps of Engineers may require review and approval of engineering aspects of the work near the culverts.

• **Acquiescence or Approval of Relocation of Utilities by Utility Companies.** Approve relocation of utilities currently located along Broadway Plaza street to accommodate the proposed new buildings and expansion of existing buildings.

• **California Department of Fish and Game.** Approve a Streambed Alteration Agreement Permit, if the Project would impact wildlife habitat within riparian corridors.

• **Regional Water Quality Control Board.** Regulatory oversight to ensure conformance with NPDES Permit.

• **Bay Area Air Quality Management District.** Regulate the equipment and activities of the Project that have the potential for creating air pollution.
CHAPTER 4
Environmental Setting, Impacts and Mitigation Measures

This Draft EIR has been prepared in accordance with CEQA (Public Resources Code Section 21000, et seq.), and the CEQA Guidelines (California Code of Regulations Sections 15000 through 15378).

This chapter contains the analysis of the Project’s potential environmental effects under CEQA. This body of this chapter describes, in numbered sections for each environmental topic (described in Section 4.01 below), the existing environmental and regulatory setting, the potential impacts that could result from the Project, as well as mitigation measures recommended to reduce the potentially significant impacts resulting from the Project.

The following introductory discussion provides an overview of the scope of the analysis, organization of the sections, the methods and nomenclature for determining significance, as well as the baseline and cumulative analysis approach used throughout.

4.01 Environmental Topics

The following environmental topics are analyzed in the following numbered sections of this chapter:

4.1 Aesthetic Resources
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Geology, Soils and Seismicity
4.6 Greenhouse Gases and Climate Change
4.7 Hazards and Hazardous Materials
4.8 Hydrology and Water Quality
4.9 Land Use and Planning
4.10 Noise
4.11 Population, Housing and Employment
4.12 Public Services and Recreation
4.13 Transportation and Circulation
4.14 Utilities and Service Systems

The Project was determined to have no potential for significant impacts related to Agricultural Resources and Mineral Resources, which therefore are briefly discussed only in Chapter 6, Impact Overview and Growth Inducement, under Section 6.4, Effects Found Not to Be Significant.
4.02 Format of Environmental Topic Sections, Impact Statements and Mitigation Measures

Each environmental topic section generally includes two main subsections:

- **Existing Setting**, which generally includes the baseline environmental conditions and the regulatory setting; and

- **Impacts and Mitigation Measures**, which lists the thresholds/criteria of significance (described in Section 4.03 below), identifies and discusses the potential impacts and proposes mitigation measures that would reduce or eliminate significant impacts.

This EIR identifies all potentially significant and significant impacts with an abbreviated designation that corresponds to the environmental topic addressed (e.g., “HAZ” for hazardous materials). The topic designator is followed by a number that indicates the sequence in which the potentially significant or significant impact statement occurs within the section. For example, “Impact HAZ-1” is the first (i.e., “1”) potentially significant or significant hazardous materials impact identified in the EIR. All impact statements are presented in bold text, including those that are less than significant.

Mitigation measures are numbered to correspond with the potentially significant or significant impact that they address. Where multiple mitigation measures address a single impact, each mitigation measure is designated sequentially by letter. For example “Mitigation Measure HAZ-1c” would be the third (i.e., “c”) mitigation identified to address the first hazardous materials impact (i.e., “HAZ-1”). All mitigation measure statements are presented in bold text.

The Impact Classification (discussed in Section 4.04 below) of the Project’s effects prior to implementation of mitigation measures is stated in parentheses immediately following the impact statement. The Impact Classification after implementation of mitigation measures is stated at the conclusion of each analysis.

4.02.1 Impacts by Project Scenario

As described in Chapter 3, Project Description, this EIR evaluates the environmental impacts of the Projects under two scenarios: a Maximum Commercial Scenario and a Maximum Mixed-Use Scenario. These two scenarios represent outside ranges of potential uses that could be developed, and are proposed to ensure that all environmental impacts that could occur within these outside ranges of development are captured. For environmental topics that would not be affected by the difference in uses proposed by each scenario, the conclusion that the environmental impacts of either scenario would be the same is clearly stated at the beginning of the impact analysis for that topic. For environmental topics that would have differing impacts with the two scenarios, the impacts are presented by scenario.
4.03 Thresholds/Criteria of Significance

Under CEQA, a significant effect is determined as a substantial, or potentially substantial, adverse change in the environment (Public Resources Code Section 21068). Each Impact and Mitigation Measures discussion in this chapter is prefaced by thresholds/criteria of significance, which are the thresholds for determining whether an impact is significant.

4.04 Impact Classifications

The following impact classifications for levels of significance are used throughout the impact analysis in this EIR:

- **No Impact (N)** – No noticeable adverse effect on the environment would occur.
- **Less than Significant (LS)** – The impacts of the Project do not reach or exceed the defined threshold/criteria of significance. No mitigation measure is required for a LS impact.
- **Potentially Significant (PS)** – The Project has the potential to create a significant impact. Where feasible, mitigation measures are identified to reduce the potentially significant impact to a less-than-significant level.
- **Significant (S)** – The impact of the Project is projected to reach or exceed the defined threshold/criteria of significance. Feasible mitigation measures are identified to reduce the significant impact to a less-than-significant level.
- **Significant and Potentially Unavoidable (SPU)** – The impact of the Project reaches or exceeds the defined threshold/criteria of significance. It is possible but not certain that identified mitigation would be sufficient to reduce the impact to a less-than-significant level. In these cases, the significant impact may be avoidable.
- **Significant Unavoidable (SU)** – The impact of the Project reaches or exceeds the defined threshold/criteria of significance. No feasible mitigation measure is available to reduce the significant impact to a less-than-significant level. In these cases, feasible mitigation measures are identified to reduce the significant impact to the maximum feasible extent, and the significant impact is considered unavoidable. Impacts are also classified as significant and unavoidable if a feasible mitigation measure is identified that would reduce the impact to a less-than-significant level, but the approval and/or implementation of the mitigation measure is not within the City’s or the Project Applicant’s sole control, in which case the analysis cannot presume implementation of the mitigation measure and the resulting less-than-significant impact. It is important to clarify that significant and unavoidable is an impact classification that only applies after consideration of possible mitigation measures.

4.05 Environmental Baseline

Overall, pursuant to Section 15125(a) of the CEQA Guidelines, this EIR measures the physical impacts of the Project against a “baseline” of physical environmental conditions that exist at and in the vicinity of the Project Site. To ensure that the impacts of the Project are clearly separated
from the impacts of projects that will be operational before this Project is considered for approval, the City used a baseline of May 2012.

In most cases the baseline condition relevant to the environmental topic being analyzed is described within the Environmental Setting (described in 4.02 above) for each environmental topic section in this chapter. In some cases (such as Section 4.1, Aesthetic Resources) discussion of the baseline condition is detailed or restated in the Impacts and Mitigation Measures discussion (described in 4.02 above) to provide the impact analysis in the most reader-friendly format and organization. The baseline also includes the policy and planning context in which the Project is proposed.

**4.06 Cumulative Analysis**

**4.06.1 Approach to the Cumulative Analysis**

CEQA defines cumulative as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonable foreseeable probable future projects. Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts when the project’s contribution to a cumulative effect is “cumulatively considerable.” “Cumulatively considerable” means that the incremental effect of an individual project is significant when viewed in connection with the effects of past, present and reasonably foreseeable future projects.

**4.06.2 Cumulative Context**

The context used for assessing cumulative impacts varies, depending on the specific topic being analyzed, to appropriately analyze the cumulative effect for the particular environmental topic. For example, considerations for the cumulative air quality analysis are different from those used for the cumulative analysis of visual resources. In assessing impacts to visual resources, only development and natural characteristics visible within the vicinity of the project would contribute to a cumulative visual effect. In assessing air quality impacts, on the other hand, all development within the air basin contributes to regional emissions of criteria pollutants, and these basin-wide projections of emissions is the best tool for determining the cumulative effect. Accordingly, the geographic context and other parameters of each topic are described in its cumulative analysis discussion.

The City’s approved but not yet constructed development projects and pending projects (see Appendix B to this Draft EIR) were used for most cumulative impact analyses. Table B-1 in Appendix B of this EIR indicates the projects that were considered in the cumulative discussion for each environmental resource area. The Transportation and Circulation analysis (and transportation-related air quality, greenhouse gases/climate change and noise), used the Contra Costa County Transit Authority (CCCTA) travel demand model, which reflects traffic from projects citywide and the broader region through 2030.
4.1 Aesthetic Resources

This section describes the existing visual setting of the Project Site and surroundings and analyzes how the Project would affect the visual quality and visual character of the area, as well as scenic vistas and resources viewed from surrounding public area. This section also addresses potential lighting and glare effects.

4.1.1 Environmental Setting

Visual Character of the Project Site and Surroundings

The City of Walnut Creek is located in the Diablo Valley at the foot of Mount Diablo. Mount Diablo and its surrounding ridgelines form a natural backdrop to the City with the Briones Hills and Lafayette Ridge to the northwest, Mount Diablo and the surrounding hills of Acalanes Ridge to the east, Shell Ridge to the southeast, and Las Trampas Ridge to the south. The City is comprised of a variety of urban development with low-density suburban residential development on the perimeter. Adjacent surrounding areas are also primarily suburban residential. The City’s urban development varies from low-rise but densely developed pedestrian retail, to mid-rise commercial office buildings on the periphery of the pedestrian retail zoning district, to low- to mid-rise strip commercial development along North Main Street and Mount Diablo Boulevard.

Project Site

The Project Site is approximately 25 acres located immediately south of the traditional downtown Walnut Creek area. The Project Site comprises ten commercial lots and a public street within the pedestrian-oriented retail core as shown in Figure 3-1, Project Site Location in Chapter 3, Project Description. Buildings within the Project Site are typically one to two-stories in height and are of varying architectural styles, which date from the 1950s to the present. Broadway Plaza has an open-air format with more than two dozen in-line and free-standing buildings of various sizes, with associated parking structures, walkways, and landscaping.

Two creeks flow through the Project Site, mostly within individual closed concrete channels for nearly their entire length through the Project Site.

Scenic Resources

The General Plan identifies views of the surrounding hills and Mount Diablo as “integral to the City’s identity, sense of place and character.” The General Plan identifies Mount Diablo Boulevard, which borders the site on the north, and South Broadway, which borders the site on the east, as scenic corridors. The General Plan also identifies a panoramic view of Mount Diablo looking east along Mount Diablo Boulevard and scenic views of Mount Diablo looking east along Newell Avenue, which borders the south end of the Project Site.
4. Environmental Setting, Impacts, and Mitigation Measures
4.1 Aesthetic Resources

The General Plan identifies prominent physical objects that serve as visual focal points and as City landmarks. There are two City landmarks within the Project Site: the fountains at Broadway Plaza, and the Nordstrom store.

**Light and Glare**

The Project Site and surroundings are located in a built-out urban environment that has existing sources of light and glare associated with land uses typical for an urban setting. Light and glare are also associated with street lights.

4.1.2 Regulatory Setting

**Local**

*City of Walnut Creek General Plan*

The City adopted its General Plan on April 4, 2006. Issues addressed in the General Plan relevant to visual quality in or around the Project Site and surroundings include the following: height, scale, and character of development; treatment of city gateways, scenic corridors, and scenic views; and views of Mount Diablo and hillside open space areas. The Project is within the Pedestrian Retail District General Plan land use designation, which is intended to “provide for a range of retail and personal service uses that are accessed by pedestrians,” as specified in the General Plan. The General Plan includes the following Built Environment goals and policies that are applicable to visual resources in the Project Site and surroundings:

In 1985, Walnut Creek residents passed Measure A, the “Building Height Freeze Initiative,” which established height limits on all new development. Measure A froze building height limits for new development based on the applicable zoning ordinance on the date the initiative was approved, and can only be modified with voter approval. Within the Project Site, Parcels, 2, 7, 7A and 8 are limited to a maximum height of 35 feet with a corner of the Project site at the intersection of Newell Avenue and South Broadway limited to a maximum of 25 feet. The remainder of the Project Site is limited to a maximum height of 50 feet. (See Figure 3-2 in Chapter 3, Project Description.)

- **Goal 13**: Maintain and enhance high quality building design and urban design.
  - *Policy 13.1*: Maintain urban design and architectural standards for evaluating the scale, appearance, and compatibility of new development proposals.
  - *Policy 13.2*: Regulate building placement and upper-floor stepbacks along important streets in the Core Area.
  - *Policy 13.3*: Coordinate the building heights allowed under the General Plan, Zoning Ordinance, and Measure A.

- **Goal 16**: Maintain and enhance Walnut Creek’s identity and sense of place.
  - *Policy 16.1*: Foster the preservation, restoration, and compatible reuse of architecturally significant structures and sites.
• **Goal 18:** Preserve and enhance the visual amenity provided by the open spaces, hills, and creeks.
  
  - *Policy 18.1:* Preserve and enhance the urban connections to scenic views that are important to residents and visitors.

• **Goal 20:** Reinforce the urban design and character of the Pedestrian Retail District as a gathering place for local residents as well as a regional retail destination.
  
  - *Policy 20.1:* Strengthen the identity of the Pedestrian Retail District as a pedestrian-oriented shopping destination for local residents and regional shoppers.
  
  - *Policy 20.2:* Maintain the special “small town” character, fine-grain development (narrow lots, slender buildings, many different uses in proximity), and pedestrian orientation of the Traditional Downtown.

**City of Walnut Creek Zoning Ordinance**

The City of Walnut Creek Zoning Ordinance establishes height and setback criteria for new development that can affect views and urban design related to the Project Site and surroundings. The Project Site is within the Pedestrian-Retail (P-R) zoning district. The P-R zone provides for a concentration of commercial activity that is destination-oriented within the City’s designated Core Area.

**City of Walnut Creek Municipal Code**

Chapter 10 of the City’s Municipal Code addresses public art in public spaces and is intended to implement Goal 12 of Chapter 2 of the City’s General Plan. The ordinance specifies that for the addition of 25,000 square feet or more of floor area to an existing building in the Core Area, a public art fee in an amount not less than one percent of the construction cost of the completed development project shall be paid into the City’s In-Lieu Public Art Fund. The public art ordinance further provides that for any project for which the public art fee to be assessed is $25,000, or more, the developer can choose to either pay the in-lieu fee or place the public art on the project site.

**Design Review Guidelines**

The Walnut Creek Design Review Commission is responsible for approving all projects proposed in the City before the issuance of any building or site development permit. All projects must meet specific standard conditions that are outlined in the City’s Design Review Guidelines (“Guidelines”), under the Design Review Ordinance, listed in Title 10, Chapter 4 of the Walnut Creek Municipal Code. The Guidelines address site planning, architecture, parking, landscaping, lighting, fencing, screening and signage. The Guidelines also address residential and commercial development, with special considerations for the Pedestrian Retail zoning district that includes the Project Site. The design objective in the City’s P-R zone is to “create a high quality, pedestrian scale, and walkable areas with a Traditional Downtown atmosphere.” Emphasis is placed on addressing pedestrian needs and developing creative approaches to improving pedestrian interest, access and enjoyment. For commercial architecture, the Guidelines stress compatible scale, mass, form and height, consistency in detailing of side and rear facades; coordination of actual and
apparent height, especially where buildings are located close to one another; and the incorporation of outdoor spaces like courtyards, patios, plazas, covered walkways, passages and gardens. The Guidelines call for uninterrupted and continuous pedestrian activity, active building frontages, pedestrian open spaces, and outdoor seating and dining.

The Project Applicants are seeking Project-specific design review guidelines as part of the Broadway Plaza Master Plan. These proposed design review guidelines will incorporate or follow many of the City’s existing guidelines, as well as add Project-specific considerations.

4.1.3 Impacts and Mitigation Measures

Significance Criteria

The Project would have a significant impact on the environment if it were to:

1. Have a substantial adverse effect on a scenic vista;
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, located within a state scenic highway;
3. Substantially degrade the existing visual character or quality of the site and its surroundings;
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Approach to Analysis

Potential impacts resulting from implementation of the Project elements were evaluated based on the General Plan, visual simulations of the Project, and a reconnaissance of the Project Site and vicinity.

Topics Briefly Addressed

Criterion 2 does not apply to the Project because the Project is not visible from State Route 24, the nearest scenic highway. State Route 24 from east portal of the Caldecott Tunnel to Interstate 680 near Walnut Creek is designated a California State Scenic Highway (California DOT, 2011). The Project Site is three quarters of a mile east from the intersection of State Route 24 and Interstate 680, the end of the scenic highway designation. The distance and the intervening terrain and buildings would prevent the Project Site from being visible from that location. Therefore, the Project would not damage scenic resources located within a state or locally designated scenic highway and is not discussed further.

Impacts by Project Scenario

For all significance criteria relating to visual resources, the impacts are the same for the Maximum Commercial Scenario and the Maximum Mixed-Use Scenario. Therefore, both scenarios are discussed under a single Impact Statement for each criterion.
Photographs of the Project Site and conceptual visual simulations of potential massing at the Project Site after buildout are provided in Figures 4.1-1 through 4.1-6 below.

The visual simulations shown in the figures above represent the proposed maximum height, massing and bulk of the Project buildings, arranged on site in a reasonably likely scenario designed to provide the reader with a conceptual depiction of potential development and its massing. As they provide no design detail, they are not representative of the details of the change in visual character the Project would entail, or the visual effects façade improvements would have. They also do not reflect full setbacks proposed in the new zoning ordinance, or regulations regarding the amount of roof area the rooftop screen may cover. The description and subsequent analysis of aesthetics focuses on the effect of the proposed expansion on views of existing Project Site elements and views through the Project Site.

Because the General Plan establishes height limits, with which the Project would comply, that protect long-range views, the viewpoints for this analysis were selected to provide close-up simulations of the Project.

Also, it should be noted that Figure 4.1-2 depicts Bing Crosby’s restaurant on a parcel immediately adjacent to the Project Site. Since the base photographs were taken, Bing Crosby’s vacated the building, which is, as of the baseline date of May 2012, expected to be occupied by Le Boulange and another retail business. The visual change to that building is not, however, significant and the change does not substantially affect the visual analysis.

**Impacts**

**Scenic Public Vistas**

The Project would not have a substantial adverse effect on scenic public vistas (Criterion 1). (Less than Significant)

The General Plan identifies the view of Mount Diablo and associated hillsides as scenic resources and seeks to preserve the urban connection to scenic views which are important to residents and visitors. The Project elements would not be expected to block or otherwise adversely affect scenic views because the Project Site is flat and the maximum heights of the proposed buildings is relatively low, consistent with other similar use buildings nearby. As described above, the visual simulations depicting maximum proposed building heights would not result in substantial changes in views surrounding the Project Site and would not result in the loss of significant scenic public vistas.

Further, the proposed General Plan amendment and zoning reclassification would require the Project to conform to the height limits currently specified in the General Plan (see Section 4.9, Land Use and Planning). The height limits in the General Plan were adopted to ensure that scenic views would not be obstructed by new development. Although new structures may be added that would change the view at street level, views across the Project Site from scenic corridors and public open space would be maintained and would remain substantially similar to existing
Figure 4.1-1
Viewpoint Map for Project Massing Visual Simulations

SOURCE: Macerich Northwestern
Figure 4.1-2
Project Massing Visual Simulation – Viewpoint 1 Looking East from South Main Street

A - Existing

B - Project

Note: The 12-foot screen shields rooftop mechanical equipment from street view.

SOURCE: Square One Productions
Figure 4.1-3
Project Massing Visual Simulation –
Viewpoint 2 Looking East from Olympic Boulevard

Source: Square One Productions

A - Existing

B - Project

Note: The 12-foot screen shields rooftop mechanical equipment from street view.
Figure 4.1-4
Project Massing Visual Simulation – Viewpoint 3 Looking South from Broadway Plaza Street

A - Existing

B - Project  
Note: The 12-foot screen shields rooftop mechanical equipment from street view.
Figure 4.1-5
Project Massing Visual Simulation – Viewpoint 4 Looking West from South Broadway

A - Existing

B - Project

Note: The 12-foot screen shields rooftop mechanical equipment from street view.

SOURCE: Square One Productions
Figure 4.1-6
Project Massing Visual Simulation – Viewpoint 5 Looking West from Newell Avenue

Note: The 12-foot screen shields rooftop mechanical equipment from street view.
conditions. Therefore, the Project would have a less-than-significant impact on scenic public vistas.

**Mitigation:** None required.

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**The Project would not substantially degrade the existing visual character or quality of the site and its surroundings (Criterion 3). (Less than Significant)**

The General Plan identifies two local landmarks within the Project Site: the fountain at Broadway Plaza (Parcel 9) and the Nordstrom store (Parcel 3). The Project would change the public access to the fountain, but does not propose to change the fountain itself. Any changes to the landmarked Nordstrom store or the fountain would require Design Review to ensure that any exterior architectural change would be in line with the goals of the General Plan.

As stated in the Project Objectives in Chapter 3, Project Description, the objective of the Project is to enhance the attractiveness and character of the City’s urban design and quality of the Core Area and its subareas, as well as to enhance and improve the vitality of Broadway Plaza. The Project would accomplish this objective by adding commercial and/or mixed-use development, making the entire Project Site pedestrian-friendly, and adding accessory uses such as health facilities, interactive play space, several plazas and common open spaces and a gathering space large enough to accommodate summer concert events and winter events.

As noted above, while the visual simulations (see Figures 4.1-1 through 4.1-6) represent the conceptual height and massing of the expansion proposed by the Project, the images present conceptual massing but do not depict final design details. Once complete, the Project buildings would include retail signage, fenestration, articulation, awnings and ornamental detailing, and would be subject to the new, proposed design guidelines. The pedestrian environment, much like the existing conditions, proposes to include landscaping, landscape trees, and public seating.

The new construction would be in keeping with the General Plan’s Built Environmental Goal 13 to maintain and enhance high-quality building design and urban design which includes functional design attributes that are state of the industry for commercial and restaurant uses and incorporation of open space and pedestrian friendly features. In addition, the design would be consistent with the green efficiency standards established under the California Building Code.

The Project would be required to undergo Design Review to ensure it meets the objectives of the General Plan, and the Project’s proposed design guidelines. Consequently, development of the Project would improve the Project Site and would not degrade the existing visual character or quality of the site and its surroundings. The impact would be less than significant.

**Mitigation:** None required.
The Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (Criterion 4). (Less than Significant)

The Project may create new sources of light or glare, but these new sources would be consistent with the existing light and glare conditions in the area. The Project Site and surroundings are already an urbanized environment with associated light and glare. Individual new structures within the Project Site would not be expected to change or affect day or nighttime views as a result of increased light or glare to a significant extent. The Project would be required to undergo Design Review to ensure it meets the objectives of the General Plan, and the Project’s proposed design guidelines.

Mitigation: None required.

__________________________

Cumulative Impacts

Geographic Context

The cumulative geographic context includes the physical environment and viewsheds visible within and across the Project Site and surroundings.

Impacts

The Project, when combined with other past, present, and reasonably foreseeable probable future development in the vicinity, would not result in a cumulative visual resources impact. (Less than Significant)

The geographic context for analysis of cumulative impacts to aesthetic resources encompasses a 0.25-mile radius from the Project Site, which is a practical distance with regard to visual resources, as other cumulative development projects located beyond this distance are not visible to and from the Project Site, and would not have visible impacts that would combine with those of the Project. Within this cumulative context, the approved but not yet constructed projects include three mixed-use projects, two residential projects, and one retail project. The cumulative effect of the other nearby approved projects and existing development in and around the Project Site would not result in a significant cumulative adverse impact on visual resources.

Much of the recently developed areas are consistent with the City’s adopted plans. Reasonably foreseeable development will have to be consistent with adopted plans and the overall vision for the City. Additionally, the Project and other reasonably foreseeable projects would be subject to design review. Present and reasonably foreseeable cumulative development, in addition to activities including rehabilitation projects and façade improvement programs, could improve or remove past development that may create adverse visual conditions. Therefore, although the effect of cumulative development may change the overall visual character of the Project Site and surroundings, it would not be expected to be adverse or result in significant cumulative impacts. The impact would be less than significant.
Mitigation: None required.

4.1.4 References


4.2 Air Quality

This section evaluates the potential impacts of the Project on regional and local air quality. Development of this chapter was based on a review of existing documentation of air quality conditions in the region, air quality regulations from the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), the Bay Area Air Quality Management District (BAAQMD), and information related to the Project Description.

4.2.1 Environmental Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality.

The Project is located in Walnut Creek (Contra Costa County), which lies within the San Francisco Bay Area Air Basin. The Bay Area Air Basin encompasses the nine-county region including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, San Francisco, Marin and Napa counties, and the southern portions of Solano and Sonoma counties. The climate of the Bay Area is determined largely by a high-pressure system that is almost always present over the eastern Pacific Ocean off the West Coast of North America. High-pressure systems are characterized by an upper layer of dry air that warms as it descends, restricting the mobility of cooler marine-influenced air near the ground surface, and resulting in the formation of subsidence inversions. In winter, the Pacific high-pressure system shifts southward, allowing storms to pass through the region. During summer and fall, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as ozone and secondary particulates, such as sulfates and nitrates.

Specifically, the Project is located within the Diablo and San Ramon Valley climatological subregion of the Bay Area Air Basin, which extends from the Carquinez Strait to the north to the Amador Valley at its southern end. Wind speeds in these valleys are generally low, at an average of five miles per hour. Temperatures in the subregion range from the summer averages in the 80s°F to winter averages in the high-30s to low-40s°F. Pollution potential is relatively high in these valleys. On winter evenings, light winds combine with surface inversions and terrain that restricts air flow can cause build up of air pollutant levels, and in the summer months, ozone and ozone precursors are often transported into the valleys from both the central Bay Area Air Basin and the Central Valley (BAAQMD, 2011a).

Existing Air Quality

The BAAQMD operates a regional monitoring network that measures the ambient concentrations of the six criteria air pollutants within the Bay Area. Existing levels of air quality in the Project Site
and surroundings can generally be inferred from ambient air quality measurements conducted by the BAAQMD at its nearby monitoring stations. The nearest station in Contra Costa County to the Project Site is the Treat Boulevard station in Concord, which measures criteria pollutants, including ozone, PM10, and PM2.5. Table 4.2-1 shows a three-year summary of monitoring data for ozone and particulates at this station. The table also compares these measured concentrations with state and federal ambient air quality standards.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Monitoring Data by Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
</tr>
<tr>
<td>Ozone</td>
<td></td>
</tr>
<tr>
<td>Highest 1 Hour Average (ppm)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.119</td>
</tr>
<tr>
<td>Days over State Standard (0.09 ppm)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Highest 8 Hour Average (ppm)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.089</td>
</tr>
<tr>
<td>Days over National Standard (0.075 ppm)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6</td>
</tr>
<tr>
<td>Days over State Standard (0.07 ppm)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>8</td>
</tr>
<tr>
<td>Particulate Matter (PM10)</td>
<td></td>
</tr>
<tr>
<td>Highest 24 Hour Average – State/National (µg/m&lt;sup&gt;3&lt;/sup&gt;)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>50.5/49.4</td>
</tr>
<tr>
<td>Estimated Days over National Standard (150 µg/m&lt;sup&gt;3&lt;/sup&gt;)&lt;sup&gt;a,c&lt;/sup&gt;</td>
<td>0</td>
</tr>
<tr>
<td>Estimated Days over State Standard (50 µg/m&lt;sup&gt;3&lt;/sup&gt;)&lt;sup&gt;a,c&lt;/sup&gt;</td>
<td>1</td>
</tr>
<tr>
<td>State Annual Average (State Standard 20 µg/m&lt;sup&gt;3&lt;/sup&gt;)&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>17.5</td>
</tr>
<tr>
<td>Particulate Matter (PM2.5)</td>
<td></td>
</tr>
<tr>
<td>Highest 24 Hour Average (µg/m&lt;sup&gt;3&lt;/sup&gt;)&lt;sup&gt;b&lt;/sup&gt; – National Measurement</td>
<td>60.3</td>
</tr>
<tr>
<td>Estimated Days over National Standard (35 µg/m&lt;sup&gt;3&lt;/sup&gt;)&lt;sup&gt;a,c&lt;/sup&gt;</td>
<td>7.0</td>
</tr>
<tr>
<td>State Annual Average (12 µg/m3)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>9.5</td>
</tr>
</tbody>
</table>

<sup>a</sup> Generally, state standards and national standards are not to be exceeded more than once per year.

<sup>b</sup> ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter.

<sup>c</sup> PM10 and PM2.5 is not measured every day of the year. Number of estimated days over the standard is based on 365 days per year.

NA = Not Available. Values in Bold exceed the respective air quality standard.

SOURCE: California Air Resources Board (CARB), 2011. Summaries of Air Quality Data, 2008-2010; http://www.arb.ca.gov/adam/cgi-bin/db2www/polltrendsb.d2w/start

Criteria Air Pollutants

**Ozone (O<sub>3</sub>)**

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NOx). ROG and NOx are known as precursor compounds for ozone. Significant ozone production generally requires ozone
4. Environmental Setting, Impacts, and Mitigation Measures
4.2 Air Quality

precursors to be present in a stable atmosphere with strong sunlight for approximately three hours. Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROG and NOx under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone. As indicated in Table 4.2-1, state and federal ozone standards have been exceeded several times in the county in each of the past three years.

**Carbon Monoxide (CO)**

Ambient CO concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic. Wind speed and atmospheric mixing also influence CO concentrations. Under inversion conditions, CO concentrations may be distributed more uniformly over an area that may extend some distance from vehicular sources. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses.

CO concentrations have declined dramatically in California due to existing controls and programs, and most areas of the state, including the region encompassing the Project Site and surroundings have no problem meeting the CO state and federal standards. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts due to the retirement of older polluting vehicles, fewer emissions from new vehicles, and improvements in fuels. The clear success in reducing CO levels is evident in the first paragraph of the executive summary of the CARB 2004 Revision to the California State Implementation Plan for Carbon Monoxide Updated Maintenance Plan for Ten Federal Planning Areas (CARB, 2004), shown below:

“The dramatic reduction in carbon monoxide (CO) levels across California is one of the biggest success stories in air pollution control. Air Resources Board (CARB or Board) requirements for cleaner vehicles, equipment and fuels have cut peak CO levels in half since 1980, despite growth. All areas of the state designated as non-attainment for the federal 8-hour CO standard in 1991 now attain the standard, including the Los Angeles urbanized area. Even the Calexico area of Imperial County on the congested Mexican border had no violations of the federal CO standard in 2003. Only the South Coast and Calexico continue to violate the more protective state 8-hour CO standard, with declining levels beginning to approach that standard.”

**Nitrogen Dioxide (NO₂)**

NO₂ is a reddish brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO₂. NO₂ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels. NO₂ is an air quality concern because it acts as a respiratory irritant and is a precursor of ozone. Nitrogen
dioxide is a major component of the group of gaseous nitrogen compounds commonly referred to as nitrogen oxides (NOx). Nitrogen oxides are produced by fuel combustion in motor vehicles, industrial stationary sources (such as industrial activities), ships, aircraft, and rail transit. Typically, nitrogen oxides emitted from fuel combustion are in the form of nitric oxide (NO) and nitrogen dioxide (NO2). NO is often converted to NO2 when it reacts with ozone or undergoes photochemical reactions in the atmosphere. Therefore, emissions of NO2 from combustion sources are typically evaluated based on the amount of NOx emitted from the source. State and federal standards for NO2 are being met throughout the Bay Area.

**Sulfur Dioxide (SO2)**

SO2 is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO2 is also a precursor to the formation of atmospheric sulfate, particulate matter and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain. State and federal standards for SO2 are being met throughout the Bay Area.

**Particulate Matter (PM)**

PM10 and PM2.5 consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. (A micron is one-millionth of a meter). PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility. Large dust particles (diameter greater than 10 microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fraction, PM10 and PM2.5, are a health concern particularly at levels above the federal and state ambient air quality standards. PM2.5 (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus, are able to penetrate to the deepest parts of the lungs. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing. Recent studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. Children are more susceptible to the health risks of PM10 and PM2.5 because their immune and respiratory systems are still developing.

Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health (Dockery and Pope, 2006). As indicated in Table 4.2-1, state and federal PM10 and PM2.5 standards have been exceeded several times in the county in each of the past three years.
Lead

Ambient lead concentrations meet both the federal and state standards in the Project Site and surroundings. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline products. The phase-out of leaded gasoline in California resulted in decreasing levels of atmospheric lead. The Project would not introduce any new sources of lead emissions; consequently, lead emissions are not required to be quantified and are not further evaluated in this analysis.

Toxic Air Contaminants

The ambient background of toxic air contaminants (TACs) is the combined result of many diverse human activities, including gasoline stations, automobiles, dry cleaners, industrial operations, hospital sterilizers, and painting operations. In general, mobile sources contribute more significantly to health risks than do stationary sources. Both BAAQMD and CARB operate a network of monitoring stations that measure ambient concentrations of certain TACs that are associated with strong health-related effects and are present in appreciable concentrations in the Bay Area, as in all urban areas. Ambient concentrations of TACs are similar throughout the urbanized areas of the Bay Area.

There is growing evidence that indicates that exposure to emissions from diesel-fueled engines, about 95 percent of which come from diesel-fueled mobile sources, may result in cancer risks that exceed those attributed to other measured TACs. In 1998, the California Office of Environmental Health Hazard Assessment (OEHHA) issued a health risk assessment that included estimates of the cancer potency of diesel particulate matter (DPM). Because DPM cannot be directly monitored in the ambient air, however, estimates of cancer risk resulting from diesel PM exposure must be based on concentration estimates made using indirect methods (e.g., derivation from ambient measurements of a surrogate compound).

Asbestos is also a TAC of concern due to the demolition of buildings and structures as part of the Project. Asbestos is a fibrous mineral, which is both naturally occurring in ultramafic rock (a rock type commonly found in California) and used as a processed component of building materials. Because asbestos has been proven to cause serious adverse health effects, including asbestosis and lung cancer, it is strictly regulated based on its natural widespread occurrence and its use as a building material.

Sensitive Land Uses

Some persons are considered more sensitive than others to air pollutants. The reasons for heightened sensitivity may include age, health problems, proximity to the emissions source, and duration of exposure to air pollutants. Land uses such as schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people are often at home for extended periods. Recreational land uses are moderately
sensitive to air pollution, because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The closest residential uses are approximately 250 feet east of the Project Site, on Holcolmb Court. Additional residences are in the Alma Park neighborhood off of California Avenue, two blocks (more than 1,000 feet) west of the Project Site. There are several apartments and condominium projects on the hills east of South Broadway and one apartment complex approximately 650 feet northeast of the closest proposed construction. Las Lomas High School is located to the south and Kaiser Hospital is located to the southwest.

4.2.2 Regulatory Setting

Federal

The federal Clean Air Act requires the U.S. EPA to identify National Ambient Air Quality Standards (NAAQS or “national standards”) to protect public health and welfare. National standards have been established for ozone (O\textsubscript{3}), carbon monoxide (CO), nitrogen dioxide (NO\textsubscript{2}), sulfur dioxide, respirable particulate matter (PM10 and PM2.5), and lead. Table 4.2-2 shows current national and state ambient air quality standards, as well as the Bay Area attainment status and common sources for each pollutant.

Pursuant to the 1990 federal Clean Air Act amendments, the U.S. EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutants, based on whether or not the national standards had been achieved. Table 4.2-2 shows the current attainment status of the vicinity of the Project.

The federal Clean Air Act requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The federal Clean Air Act amendments added requirements for states containing areas that violate the national standards to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The U.S. EPA has responsibility to review all SIPs to determine if they conform to the mandates of the federal Clean Air Act amendments and will achieve air quality goals when implemented. If the U.S. EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures. Failure to submit an approvable SIP or to implement the plan within mandated timeframes can result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

Regulation of TACs, termed Hazardous Air Pollutants (HAPs) under federal regulations, is achieved through federal, state and local controls on individual sources. The 1977 federal Clean Air Act amendments required the U.S. EPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. These substances include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible
### TABLE 4.2-2
AMBIENT AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>State Standard</th>
<th>Bay Area Attainment Status for California Standard</th>
<th>Federal Primary Standard</th>
<th>Bay Area Attainment Status for Federal Standard</th>
<th>Major Pollutant Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>8 hour</td>
<td>0.070 ppm</td>
<td>Non-Attainment</td>
<td>0.075 ppm</td>
<td>Non-Attainment</td>
<td>Formed when ROG and NOx react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/industrial mobile equipment.</td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>0.090 ppm</td>
<td>Non-Attainment</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>8 hour</td>
<td>9.0 ppm</td>
<td>Attainment</td>
<td>9.0 ppm</td>
<td>Attainment</td>
<td>Internal combustion engines, primarily gasoline-powered motor vehicles</td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>20 ppm</td>
<td>Attainment</td>
<td>35 ppm</td>
<td>Attainment</td>
<td></td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>Annual Average</td>
<td>0.030 ppm</td>
<td>---</td>
<td>0.053 ppm</td>
<td>Attainment</td>
<td>Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads</td>
</tr>
<tr>
<td></td>
<td>1 Hour</td>
<td>0.180 ppm</td>
<td>Attainment</td>
<td>0.100 ppm</td>
<td>Unclassified</td>
<td></td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Annual Average</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Attainment</td>
<td>Fuel combustion, chemical plants, sulfur recovery plants and metal processing</td>
</tr>
<tr>
<td></td>
<td>24 Hour</td>
<td>0.04 ppm</td>
<td>Attainment</td>
<td>0.14 ppm</td>
<td>Attainment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Hour</td>
<td>0.25 ppm</td>
<td>Attainment</td>
<td>0.075 ppm</td>
<td>Attainment</td>
<td></td>
</tr>
<tr>
<td>Particulate Matter (PM_{10})</td>
<td>Annual Arithmetic Mean</td>
<td>20 μg/m3</td>
<td>Non-Attainment</td>
<td>---</td>
<td>---</td>
<td>Dust- and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays)</td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>50 μg/m3</td>
<td>Non-Attainment</td>
<td>150 μg/m3</td>
<td>Unclassified</td>
<td></td>
</tr>
<tr>
<td>Particulate Matter (PM_{2.5})</td>
<td>Annual Arithmetic Mean</td>
<td>12 μg/m3</td>
<td>Non-Attainment</td>
<td>15 μg/m3</td>
<td>Attainment</td>
<td>Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.</td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>---</td>
<td>---</td>
<td>35 μg/m3</td>
<td>Non-Attainment</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>Calendar Quarter</td>
<td>---</td>
<td>---</td>
<td>1.5 μg/m3</td>
<td>Attainment</td>
<td>Present source: lead smelters, battery manufacturing &amp; recycling facilities. Past source: combustion of leaded gasoline.</td>
</tr>
<tr>
<td></td>
<td>30 Day Average</td>
<td>1.5 μg/m3</td>
<td>Attainment</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>1 hour</td>
<td>0.03 ppm</td>
<td>Unclassified</td>
<td>No Federal Standard</td>
<td>---</td>
<td>Geothermal Power Plants, Petroleum Production and refining</td>
</tr>
<tr>
<td>Visibility Reducing Particles</td>
<td>8 hour</td>
<td>Extinction of 0.23/km; visibility of 10 miles or more</td>
<td>Unclassified</td>
<td>No Federal Standard</td>
<td>---</td>
<td>See PM_{2.5}.</td>
</tr>
</tbody>
</table>

NOTE: ppm=parts per million; and μg/m³=micrograms per cubic meter

hazard, based on scientific studies of exposure to humans and other mammals. There is uncertainty in the precise degree of hazard.

State

The CARB manages air quality, regulates mobile emissions sources, and oversees the activities of county Air Pollution Control Districts and regional Air Quality Management Districts. CARB establishes state ambient air quality standards and vehicle emissions standards. California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants and include air quality standards for some pollutants for which there is no corresponding national standard. These are shown in Table 4.2-2. Under the California Clean Air Act patterned after the Federal Clean Air Act, areas have been designated as attainment or nonattainment with respect to the state standards. Table 4.2-2 summarizes the attainment status with California standards in the Bay Area.

Toxic Air Contaminants

The Health and Safety Code defines TACs as air pollutants which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner). A total of 243 substances have been designated TACs under California law; they include the 189 (federal) Hazardous Air Pollutants adopted in accordance with AB 2728. The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. Toxic air contaminant emissions from individual facilities are quantified and prioritized. “High-priority” facilities are required to perform a health risk assessment and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings.

In August of 1998, CARB identified DPM as TACs. CARB subsequently developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB, 2000). The document represents proposals to reduce diesel particulate emissions, with the goal of reducing emissions and associated health risks by 75 percent in 2010 and by 85 percent in 2020. The program aims to require the use of state-of-the-art catalyzed diesel particulate filters and ultra low sulfur diesel fuel on diesel-fueled engines.

In April 2005, CARB published Air Quality and Land Use Handbook: A Community Health Perspective (CARB, 2005). This handbook is intended to give guidance to local governments in the siting of sensitive land uses, such as residences, schools, daycare centers, playgrounds, or medical facilities, near sources of air pollution. There are TAC sources predominantly associated with commercial uses located in the Project Site and surroundings, including gasoline dispensing facilities and dry cleaning operations.
Regional

Air Quality Plans

The 1977 federal Clean Air Act amendments require that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards specified in the Clean Air Act. The 1988 California Clean Air Act also requires development of air quality plans and strategies to meet state air quality standards in areas designated as non-attainment (with the exception of areas designated as non-attainment for the state PM standards). Maintenance plans are required for attainment areas that had previously been designated non-attainment in order to ensure continued attainment of the standards. Air quality plans developed to meet federal requirements are referred to as SIPs, discussed above.

Bay Area plans are prepared with the cooperation of the BAAQMD, Metropolitan Transportation Commission (MTC), and the Association of Bay Area Governments (ABAG). On September 15, 2010, the BAAQMD adopted the most recent revision to the Clean Air Plan - the Bay Area 2010 Clean Air Plan (BAAQMD, 2010). The Bay Area 2010 Clean Air Plan serves to:

- Update the Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement “all feasible measures” to reduce ozone;
- Consider the impacts of ozone control measures on particulate matter, air toxics, and greenhouse gases in a single, integrated plan;
- Review progress in improving air quality in recent years; and
- Establish emission control measures to be adopted or implemented in the 2010 – 2012 timeframe.

BAAQMD Rules, Regulations, and CEQA Guidelines

The BAAQMD is the regional agency responsible for rulemaking, permitting, and enforcement activities affecting stationary sources in the Bay Area. BAAQMD does not have authority to regulate emissions from motor vehicles. Specific rules and regulations adopted by the BAAQMD limit the emissions that can be generated by various activities, and identify specific pollution reduction measures that must be implemented in association with various activities. These rules regulate not only emissions of the six criteria air pollutants, but also toxic emissions and acutely hazardous non-radioactive materials emissions.

Emissions sources subject to these rules are regulated through the BAAQMD’s permitting process and standards of operation. Through this permitting process, including an annual permit review, the BAAQMD monitors generation of stationary emissions and uses this information in developing its air quality plans. Any sources of stationary emissions constructed as part of the Project would be subject to the BAAQMD Rules and Regulations. Both federal and state ozone plans rely heavily upon stationary source control measures set forth in BAAQMD’s Rules and Regulations.
With respect to construction activities associated with Project development, applicable BAAQMD regulations would relate to portable equipment (e.g., concrete batch plants, and gasoline- or diesel-powered engines used for power generation, pumps, compressors, pile drivers, and cranes), architectural coatings, and paving materials. Equipment used during project construction would be subject to the requirements of BAAQMD Regulation 2 (Permits), Rule 1 (General Requirements) with respect to portable equipment unless exempt under Rule 2-1-105 (Exemption, Registered Statewide Portable Equipment); BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings); and BAAQMD Regulation 8 (Organic Compounds), Rule 15 (Emulsified and Liquid Asphalts). In addition, the BAAQMD regulates the demolition of buildings or structures that may contain asbestos through Regulation 11 (Hazardous Pollutants) Rule 2 (Asbestos Demolition, Renovation, and Manufacturing).

BAAQMD adopted updated California Environmental Quality Act (CEQA) Air Quality Guidelines, including new thresholds of significance in June 2010 and revised in May 2011 (BAAQMD, 2011a), which advise lead agencies on how to evaluate potential air quality impacts with the adopted new thresholds of significance. The thresholds BAAQMD adopted were called into question by an order issued March 5, 2012 in California Building Industry Association v. BAAQMD, Alameda Superior Court Case No. RGI0548693. The order requires the BAAQMD thresholds to be subject to further environmental review. The claims made in the case concerned the CEQA impacts of adopting the thresholds, i.e., how the thresholds would affect land use development patterns, and petitioners argued that the thresholds for Health Risk Assessments encompassed issues not addressed by CEQA. Those issues are not relevant to the scientific soundness of the BAAQMD’s analysis of what levels of pollutants should be deemed significant, or the threshold to use in assessing any health risk impact the Project will have on the existing environment. The City agrees that those thresholds are supported by substantial evidence. Moreover, the thresholds will not cause any impacts in terms of land use development patterns insofar as this project is concerned, because the proposal to expand Broadway Plaza was not influenced by the BAAQMD guidelines. Accordingly, the analysis herein uses the updated thresholds and methodologies from the BAAQMD CEQA Air Quality Guidelines to determine the potential impacts of the Project on the existing environment.

In addition, pursuant to BAAQMD guidance and as further explained below, this EIR addresses exposure of future Project residents and workers to emissions. These discussions do not address impacts of the Project on the existing environment, but are included at the direction of the City to provide a comprehensive analysis of onsite and offsite air quality issues.

**Local**

Chapter 4 (Built Environment), of the Walnut Creek General Plan 2025 (City of Walnut Creek, 2006) includes the following goals and policies that are relevant to air quality in Walnut Creek:

- **Goal 3**: Encourage housing and commercial mixed-use development in selected locations that enhances pedestrian access and reduces traffic.
  - **Policy 3.1**: Create opportunities for mixed-use developments.
4. Environmental Setting, Impacts, and Mitigation Measures

4.2 Air Quality

- **Goal 12**: Make more efficient use of the regional and subregional transportation system.
  - *Policy 12.1*: Promote the use of carpools and vanpools.
  - *Policy 12.2*: Support infill and redevelopment in existing urban areas.

- **Goal 31**: Strive to meet State and federal air-quality standards for the region.
  - *Policy 31.1*: Work with the Bay Area Air Quality Management District (BAAQMD) and the County in promoting better air quality.
  - *Policy 31.2*: Consider additional land use and development criteria, standards, and decisions that have positive impacts on air quality and quality of life in general.
  - *Policy 31.3*: Proactively manage local air quality issues.

### 4.2.3 Impacts and Mitigation Measures

#### Significance Criteria

The Project would result in a significant impact if it were to:

1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
2. Conflict with or obstruct implementation of the applicable air quality plan;
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
4. Expose sensitive receptors to substantial pollutant concentrations; or
5. Create objectionable odors affecting a substantial number of people.

#### Significance Thresholds

For the Significance Criteria above, the Bay Area Air Quality Management District, as the agency with jurisdiction over Walnut Creek and the San Francisco Bay Area, has established the following significance thresholds in order for a project to meet the significance criteria outlined above.

#### Criteria Pollutants

Updated BAAQMD CEQA Air Quality Guidelines (BAAQMD, 2011a) establish the following quantitative and qualitative thresholds of significance for criteria pollutant emissions:

- Result in total construction emissions of ROG, NOx, or PM2.5 (exhaust) of 10 tons per year or greater, or 54 pounds per day or greater.
- Exceed a construction emission threshold for PM10 (exhaust) of 15 tons per year or greater, or 82 pounds per day or greater.
4. Environmental Setting, Impacts, and Mitigation Measures

4.2 Air Quality

- For PM10 and PM2.5 emitted as fugitive dust generated during construction, the BAAQMD Guidelines specify compliance with Best Management Practices as the threshold.

- Result in total operational emissions of ROG, NOx, or PM2.5 of 10 tons per year or greater, or 54 pounds per day or greater.

- Exceed an operational emission threshold for PM10 of 15 tons per year or greater, or 82 pounds per day.

- Result in CO concentrations of 9.0 ppm (8-hour average) and 20.0 ppm (1-hour average).

According to the BAAQMD CEQA Air Quality Guidelines, a project’s contribution to cumulative impacts for criteria pollutants should be considered significant if the project’s impact individually would be significant (i.e., exceeds the BAAQMD’s quantitative thresholds).

**Odors**

The operational threshold is based on complaint history, whereby five complaints per year averaged over three years would be considered significant.

**Health Risks and Hazards**

The operation of any project with the potential to expose sensitive receptors to substantial levels of TACs (such as DPM) would be deemed to have a potentially significant impact. More specifically, projects that have the potential to expose the public to TACs in excess of the following BAAQMD CEQA thresholds would be considered to have a significant air quality impact:

- Probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million people for 70 year exposure.

- Ground-level concentrations of non-carcinogenic TACs would exceed a Hazard Index greater than 1 for the MEI.

- Result in an incremental increase in localized annual average concentrations of PM2.5 exceeding 0.3 micrograms per cubic meter from either project construction or operations.

Under the current BAAQMD CEQA Air Quality Guidelines, a project would result in a significant localized risk and hazard cumulative impact to air quality if it would:

- Result in potential to expose persons to substantial levels of TACs, such that the probability of contracting cancer for the MEI considering all existing sources within 1,000 feet of the Project fence line and Project sources exceeds 100 in one million; or

- Result in potential to expose persons to substantial levels of TACs, such that the acute or chronic hazard index would exceed 10 for the Maximally Exposed Individual considering all existing sources within 1,000 feet of the Project fence line; or

- Result in an incremental increase in localized annual average concentrations of PM2.5 exceeding 0.8 micrograms per cubic meter considering all existing sources within 1,000 feet of the Project fence line and Project sources.
These criteria are applied broadly. CEQA requires an analysis whether the Project would cause impacts on the existing environment. Air quality impacts to future residents and workers of the Project are not within the scope of a CEQA analysis. However, the City has directed that this EIR also evaluate how air quality issues may affect future residents and workers within the Project. Accordingly, the above criteria are applied to non-CEQA issues as well. For ease of reference, both CEQA and non-CEQA issues are addressed together, which means that phrases such as “impact” and “mitigation measure” are applied to both CEQA and non-CEQA analysis. Insofar as the non-CEQA issues are concerned, “impacts” are regulatory issues, and the phrase “mitigation measures” is used to refer to recommended conditions of approval.

**Approach to Analysis**

**Criteria Pollutants**

Project-related air quality impacts fall into two categories: short-term impacts due to construction, and long-term impacts due to project operation. First, during project construction (short-term), the Project would affect local particulate concentrations primarily due to fugitive dust sources. Under operations (long-term), the Project would result in an increase in emissions primarily due to motor vehicle trips and on-site stationary sources such as boilers for natural gas combustion for space and water heating. Other sources include minor area sources such as landscaping and use of consumer products.

Air quality assessment methodologies in this section generally conform to those identified by BAAQMD in its updated CEQA Guidelines (BAAQMD, 2011a). Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2011.1.1. BAAQMD acknowledges CalEEMod as an appropriate tool for assessment of air quality impacts relative to CEQA (Kirk, 2012). This model was also used to calculate the effectiveness of proposed mitigation measures. Construction of the project is expected to begin in 2014 and would occur over a period of approximately three years. Operational phase emissions were also estimated using CalEEMod and incorporate the trip generation figures developed by Kittelson Associates/Dowling, Inc. for the Project.

The screening criteria and methodology included in the BAAQMD’s *CEQA Air Quality Guidelines* was followed for localized carbon monoxide “hot spot” analysis.

Lastly, cumulative criteria air pollutant impacts of the project were evaluated based on the BAAQMD *CEQA Guidelines* as discussed under the significance thresholds.

**Health Risks and Hazards**

A health risk assessment (HRA)\(^1\) was conducted to evaluate the cancer risks and non-cancer health effects associated with exposure to TACs emitted as a result of the project. Cancer risks\(^2\)

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\(^{1}\) An analysis designed to predict the generation and dispersion of air toxics in the outdoor environment, evaluate the potential for exposure of human populations, and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure.

\(^{2}\)
are evaluated based on 70 year exposure, pursuant to BAAQMD’s Health Risk Screening Analysis Guidelines (BAAQMD, 2005). Non-cancer health risks\(^3\) include adverse health effects from both acute (highest 1-hour) and chronic (average annual) exposure. BAAQMD also requires the analysis of PM2.5 concentrations\(^4\). The HRA methods are designed to estimate the highest possible, or “upper bound” risks to the most sensitive members of the population (i.e., children, elderly, infirm), as well as those that are potentially exposed to TACs on a routine and prolonged basis (i.e., residents). Air toxics associated with the project include diesel particulate matter (DPM) emissions from construction and project operations.

The HRA was conducted in accordance with technical guidelines developed by federal, state, and regional agencies, including California EPA, California OEHHA Air Toxics Hot Spots Program Guidance (OEHHA, 2003), and the BAAQMD’s Health Risk Screening Analysis Guidelines (BAAQMD, 2005).

The HRA is based on estimated TAC emissions from the project and the length of time those living, working, and recreating in the vicinity of the Project Site could be exposed to TAC emissions. Actual exposures are not measured, but rather are modeled using sophisticated software that uses local meteorology and topography to predict the dispersion of TACs from their source and the resulting concentrations at receptors. The models tend to be conservative, both in terms of the estimated exposure, and the toxic effects of the substances to which people are exposed; thus, the models tend to overestimate the adverse health effect.

For this project, the HRA focused on the health impacts on the new residences as part of the Maximum Mixed-Use scenario and the existing residences, hospitals, and schools for the Maximum Commercial and the Maximum Mixed-Use scenarios. The methodology, calculations, and supporting data for the HRA are included in Appendix C.

According to CalEPA, an HRA should not be interpreted as the expected rates of cancer or other potential health effects, but rather as estimates of potential risk or likelihood of adverse effects based on current knowledge, under a number of highly conservative assumptions and the best assessment tools currently available.

**Impacts by Project Scenario**

For all significance criteria relating to air quality, Project-related impacts are discussed together under a single Impact Statement for each criterion. Where appropriate, specific discussions are provided for the Maximum Commercial Scenario and the Maximum Mixed-Use Scenario under each criterion.

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\(^2\) Cancer risk is defined as the lifetime probability of developing cancer from exposure to carcinogenic substances. Cancer risks are expressed as the chances in one million of contracting cancer, for example, 10 cancer cases among one million people exposed.

\(^3\) Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the Project to published reference exposure levels (RELs) that can cause adverse health effects.

\(^4\) The BAAQMD guidance stipulates inclusion of PM2.5 exhaust emissions only in this analysis (i.e., fugitive dust emissions are addressed through employing BAAQMD’s Best Management Practices found in Mitigation Measure 4.1-1).
Impacts

Short-term Emissions of Criteria Pollutants

Impact AIR-1: Activities associated with demolition, site preparation, and construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions (Criteria 1 and 2). (Potentially Significant)

For either the Maximum Commercial and Maximum Mixed-Use scenarios of the Project, construction emissions would be relatively short-term but could still cause adverse effects on local air quality. As described in Chapter 3, Project Description, construction activities (including demolition of existing structures) would occur approximately from 2014 to 2016 (three years assumed), with demolition and grading projected to occur January through November of 2014.

Demolition activities may result in airborne entrainment of asbestos, a TAC, particularly where structures built prior to 1980 would be demolished. As discussed in Chapter 3, Project Description, some of the structures proposed to be demolished were built in the 1960s. However, these materials would be removed in accordance with regulatory requirements prior to demolition (as described below in Mitigation Measure AIR-1b).

In addition to demolition, construction activities would include site preparation and grading as well as general construction. Site preparation and grading activities would cause soil disturbance, which would lead to fugitive dust emissions of PM10 and PM2.5. Heavy duty construction equipment, construction-related on-road trucks, and worker vehicles would also result in exhaust emissions of ROG, NOx, CO, SOx, PM10, and PM2.5 during construction of the Project. Exhaust emissions would vary depending on the number and type of construction equipment used, number of truck trips to the site, and number of workers present. Construction-related fugitive dust would vary from day to day depending on the level and type of activity, silt content of the soil, and the weather. Without mitigation, fugitive dust from construction activities would have the potential to result in high concentrations of PM10 and PM2.5 and could affect local visibility. Consequently, BAAQMD has identified a menu of mitigation measures to be implemented to ensure that fugitive dust from construction impact is a less than significant impact. These measures are identified below as Mitigation Measure AIR-1a.

The CalEEMod model was used to quantify construction emissions associated with off-road equipment, fugitive dust, paving, architectural coatings, haul trucks associated with demolition and soils export, on-road worker vehicle emissions and vendor delivery trips. Information in Chapter 3, Project Description, was used for the analysis and is included in Appendix C to this Draft EIR. Unmitigated and mitigated construction-related emissions for the Project are presented in Tables 4.2-3 and 4.2-4 for the Maximum Commercial Scenario and the Maximum Mixed-Use Scenario, respectively. The estimated emissions for each scenario consider the following basic construction phases: demolition; excavation/grading; building construction; asphalt paving; and application of architectural coatings.
As shown in Tables 4.2-3 and 4.2-4, unmitigated construction-related emissions would exceed the BAAQMD threshold for NOx for each scenario. The main contributors of NOx during construction would be haul trucks used to export soils excavated for construction of the underground garages and off-road construction equipment. Implementation of the Mitigation Measure AIR-1c would reduce emissions of NOx to a less-than-significant level.

Mitigation Measure AIR-1a: Construction Emission Controls. During construction, the Project Applicants shall require the construction contractor to implement the measures that are specified under BAAQMD’s basic and additional construction mitigation procedures. These include:

- **Basic Control Measures.** These measures are required for all construction projects in the BAAQMD jurisdiction:
  - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
  - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
  - All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
  - All vehicle speeds on unpaved roads shall be limited to 15 mph. Signage with this speed restriction shall be imposed where appropriate and applicable.
  - All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
  - All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
  - Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.

- **Additional Control Measures.** Since unmitigated construction emissions would exceed the BAAQMD thresholds, the Project Applicants and their contractors shall implement the following additional control measures during project construction:
  - Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes. Clear signage shall be provided for construction workers at all access points.
  - The Project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels,
### TABLE 4.2-3
AVERAGE ANNUAL DAILY CONSTRUCTION-RELATED POLLUTANT EMISSIONS – MAXIMUM COMMERCIAL SCENARIO (pounds/day)\(^a\)

<table>
<thead>
<tr>
<th>Year</th>
<th>ROG</th>
<th>NOx</th>
<th>Exhaust PM10(^b)</th>
<th>Exhaust PM2.5(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>10</td>
<td>85</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>5</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>21</td>
<td>52</td>
<td>3</td>
</tr>
<tr>
<td><strong>BAAQMD Construction Threshold</strong></td>
<td></td>
<td>54</td>
<td>54</td>
<td>82</td>
</tr>
<tr>
<td><strong>Significant Impact?</strong></td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Mitigated Emissions\(^c\)**

<table>
<thead>
<tr>
<th>Year</th>
<th>ROG</th>
<th>NOx</th>
<th>Exhaust PM10(^b)</th>
<th>Exhaust PM2.5(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>7</td>
<td>51</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>4</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>19</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td><strong>BAAQMD Construction Threshold</strong></td>
<td></td>
<td>54</td>
<td>54</td>
<td>82</td>
</tr>
<tr>
<td><strong>Significant Impact?</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^a\) Emissions include results modeled with CalEEMod. Additional data and assumptions are described Chapter 3, Project Description, and Appendix C.

\(^b\) BAAQMD’s construction-related significance thresholds for PM10 and PM2.5 apply to exhaust emissions only and not to fugitive dust.

\(^c\) Mitigation measures were incorporated into the CalEEMod model to reflect the Basic Control Measures described below under Mitigation Measure AIR-1a, per the BAAQMD CEQA Air Quality Guidelines.

### TABLE 4.2-4
AVERAGE ANNUAL DAILY CONSTRUCTION-RELATED POLLUTANT EMISSIONS – MAXIMUM MIXED-USE SCENARIO (pounds/day)\(^a\)

<table>
<thead>
<tr>
<th>Year</th>
<th>ROG</th>
<th>NOx</th>
<th>Exhaust PM10(^b)</th>
<th>Exhaust PM2.5(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>6</td>
<td>83</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>5</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>29</td>
<td>47</td>
<td>3</td>
</tr>
<tr>
<td><strong>BAAQMD Construction Threshold</strong></td>
<td></td>
<td>54</td>
<td>54</td>
<td>82</td>
</tr>
<tr>
<td><strong>Significant Impact?</strong></td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Mitigated Emissions**

<table>
<thead>
<tr>
<th>Year</th>
<th>ROG</th>
<th>NOx</th>
<th>Exhaust PM10(^b)</th>
<th>Exhaust PM2.5(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>7</td>
<td>51</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>4</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>27</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td><strong>BAAQMD Construction Threshold</strong></td>
<td></td>
<td>54</td>
<td>54</td>
<td>82</td>
</tr>
<tr>
<td><strong>Significant Impact?</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^a\) Emissions include results modeled with CalEEMod. Additional data and assumptions are described Chapter 3, Project Description, and Appendix C.

\(^b\) BAAQMD’s construction-related significance thresholds for PM10 and PM2.5 apply to exhaust emissions only and not to fugitive dust.

\(^c\) Mitigation measures were incorporated into the CalEEMod model to reflect the Basic Control Measures described below under Mitigation Measure AIR-1a, per the BAAQMD CEQA Air Quality Guidelines.
engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.\(^5\)

- Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.\(^5\)

- Require all contractors to use equipment that meets CARB’s most recent certification standard for off-road heavy duty diesel engines.\(^5\)

**Mitigation Measure AIR-1b: Demolition Controls.** Demolition and disposal of any asbestos containing building material would be in accordance with the procedures specified by Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of BAAQMD’s regulations.

**Mitigation Measure AIR-1c: Off-road Demolition and Grading Equipment Emission Controls.** Emission of NOx associated with demolition and grading activities would exceed BAAQMD significance thresholds without mitigation. Excavators engaged in demolition and grading activities shall be equipped with Tier 4 engines. All other off-road construction equipment engaged in demolition and grading activities shall be equipped with Tier 3 or better engines.

**Significance after Mitigation:** As depicted in Tables 4.2-3 and 4.2-4, the implementation of mitigation measures would reduce NOx emissions to below BAAQMD thresholds for either the Maximum Commercial or Maximum Mixed-Use scenario. This impact would be less than significant with mitigation.

**Long-term Emissions of Criteria Pollutants**

**Impact AIR-2: Operation of the Project would result in increased long-term emissions of criteria pollutants (Criteria 1 and 2). (Potentially Significant for both Scenarios)**

The Project would result in an increase in criteria air pollutant emissions from a variety of emissions sources, including on-site area sources (e.g., natural gas combustion for space and water heating, landscape maintenance, use of consumer products such as hairsprays, deodorants, cleaning products, etc.) and mobile on-road sources. Exhaust emissions from on-road vehicle traffic associated with the Project were calculated by using the CalEEMod program, which uses EMFAC2011 (CARB’s vehicle emissions model for on-road sources). CalEEMod calculates area source emissions based on the Project size and types of land uses.

The Project would result in approximately 9,100 net new vehicle trips per day for the Maximum Commercial Scenario, and approximately 5,508 net new vehicle trips per day for the Maximum Mixed-Use Scenario. **Tables 4.2-5 and 4.2-6** summarize Project-generated mobile and on-site area

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\(^5\) The Level 3 Verified Diesel Emissions Control (VDEC) required under Mitigation Measure AIR-3b would also comply with this measure.
emissions of criteria pollutants for the Project in 2017 assuming build-out vehicle trip generation and compare them with BAAQMD significance thresholds.

As indicated in Table 4.2-5, Project-related operational emissions of NOx under the Maximum Commercial Scenario would exceed the BAAQMD significance threshold. This analysis is based on Section 4.13 of this EIR. To ensure all potential traffic impacts are identified, the transportation analysis uses project trip generation estimates that do not include any adjustment for mode choice despite high walkability and the availability of transit and particularly the free shuttle that serves the area. Accordingly, the transportation analysis assumes a typical 1 million square-foot shopping center; such centers are not commonly located in areas such as downtown Walnut Creek. Normally, however, air districts, including BAAQMD, acknowledge trip reductions of zero to nine percent based on a project’s mix of uses and bike and pedestrian compatibility, and zero to 15 percent based on availability of transit services. See BAAQMD CEQA Guidelines, pages 4-12 to 4-13. All of these factors would be positive for the Project and indicate that vehicle trip reductions would be sufficient (compared to standard ITE rates) to reduce NOx impacts to less-than-significant. In addition, Mitigation Measure AIR-2a is identified to further reduce this impact.

Mitigation Measure AIR-2a: Operational NOx Emission Reduction – Maximum Commercial Scenario. The Project Applicant shall implement a voluntary commute trip reduction program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as car-pooling, taking transit, walking, and biking. The program may include, but is not limited to, a ride-sharing program for which 50 percent or greater of Project employees are eligible, carpooling encouragement, preferential carpool parking, a transportation coordinator, and ride-matching assistance.

Significance after Mitigation for the Maximum Commercial Scenario: Less than Significant.

As indicated in Table 4.2-6, Project-related operational emissions of ROG under the Maximum Mixed-Use Scenario would exceed the BAAQMD significance threshold. Consequently, Mitigation Measure AIR-2b is identified to reduce this impact to a less than significant level. Emissions for both scenarios would be significant without mitigation.

Mitigation Measure AIR-2b: Operational ROG Emission Controls – Maximum Mixed Use Scenario. Natural gas-only fireplace hearths

Wood burning fireplaces shall not be installed in proposed residential units. If fireplaces are to be included in the design of residential units, these hearths shall be designed for natural gas combustion only.

Significance after Mitigation for the Maximum Mixed-Use Scenario: Restricting hearths (commonly found in residences) to only natural gas under the Maximum Mixed-Use Scenario would reduce ROG emissions to below the BAAQMD thresholds, even without implementation of any other items in Mitigation Measure AIR-2a. Therefore, operations under the Mixed-Use scenario of the Project would be considered less than significant after mitigation.
### TABLE 4.2-5
MAXIMUM COMMERCIAL SCENARIO DAILY OPERATIONAL EMISSIONS FOR THE PROJECT

<table>
<thead>
<tr>
<th>Emissions Source</th>
<th>Project Emissions - Year 2017 (pounds/day)(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROG</td>
</tr>
<tr>
<td>Unmitigated Emissions</td>
<td></td>
</tr>
<tr>
<td>Area Source</td>
<td>8</td>
</tr>
<tr>
<td>Vehicular Source</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
</tr>
<tr>
<td>BAAQMD Operations Thresholds</td>
<td>54</td>
</tr>
<tr>
<td>Significant (Yes or No)?</td>
<td>No</td>
</tr>
</tbody>
</table>

| Mitigated Emissions\(^b\) |     |     |      |        |
| Area Source       | 8   | <1  | <1   | <1     |
| Vehicular Source  | 31  | 51  | 51   | 4      |
| Total             | 39  | 52  | 51   | 4      |
| BAAQMD Operations Thresholds | 54  | 54  | 82   | 54     |
| Significant (Yes or No)? | No | No  | No   | No     |

\(^a\) Emissions were generated using CalEEMod model with a default vehicle mix. Daily estimates are for summertime or wintertime conditions, which ever are greater. Additional data and assumptions are described Chapter 3, Project Description, and Appendix C.

\(^b\) Mitigation Measure AIR-2 was incorporated into CalEEMod using default model reductions. Additional assumptions are included in Appendix C.

### TABLE 4.2-6
MAXIMUM MIXED-USE SCENARIO DAILY OPERATIONAL EMISSIONS FOR THE PROJECT

<table>
<thead>
<tr>
<th>Emissions Source</th>
<th>Project Emissions - Year 2017 (pounds/day)(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROG</td>
</tr>
<tr>
<td>Unmitigated Emissions</td>
<td></td>
</tr>
<tr>
<td>Area Source</td>
<td>59</td>
</tr>
<tr>
<td>Energy</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Vehicular Source</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
</tr>
<tr>
<td>BAAQMD Operations Thresholds</td>
<td>54</td>
</tr>
<tr>
<td>Significant (Yes or No)?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

| Mitigated Emissions\(^b\) |     |     |      |        |
| Area Source       | 11  | <1  | <1   | <1     |
| Energy            | <1  | 1   | <1   | <1     |
| Vehicular Source  | 20  | 34  | 34   | 3      |
| Total             | 31  | 34  | 34   | 3      |
| BAAQMD Operations Thresholds | 54  | 54  | 82   | 54     |
| Significant (Yes or No)? | No | No  | No   | No     |

\(^a\) Emissions were generated using the CalEEMod model with a default vehicle mix. Daily estimates are for summertime or wintertime conditions, which ever are greater. Additional data and assumptions are described Chapter 3, Project Description, and Appendix C.

\(^b\) The residential hearth percentage was adjusted to 100 percent natural gas. The other Mitigation Measure AIR-2 controls were incorporated into CalEEMod using default model reductions. Additional assumptions are included in Appendix C.
4. Environmental Setting, Impacts, and Mitigation Measures

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**Carbon Monoxide Concentrations from Project Traffic**

*Project traffic would increase localized carbon monoxide concentrations at intersections in the project vicinity (Criterion 4). (Less than Significant)*

According to the BAAQMD CEQA Air Quality Guidelines, a Project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met:

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.

2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The Project under either Project scenario would not exceed the standards included in the Congestion Management Program established by the Contra Costa Transportation Authority (CCTA). In regards to the second and third screening criteria, intersection traffic volumes (including minimal external Project traffic) would be substantially less than 44,000 and 24,000 vehicles per hour, respectively. The estimated increase in traffic volumes generated by the Project would not be substantial relative to background traffic conditions, nor would Project traffic significantly disrupt daily traffic flow on area roadways.

Based on the BAAQMD’s criteria, Project-related traffic would not lead to violations of the carbon monoxide standards and therefore, no further analysis was conducted for carbon monoxide impacts of the project at these intersections. This impact would be considered less than significant.

**Mitigation:** None required.

**Objectionable Odors**

*The Project would not create substantial objectionable odors affecting a substantial number of people (Criterion 5). (Less than Significant)*

The Project under either Project scenario would not include uses that have been identified by BAAQMD as potential sources of objectionable odors. Sources of odors include restaurants, manufacturing plants, and agricultural operations, and industrial operations such as wastewater treatment plants and solid waste transfer stations or landfills. While sources that generate
4. Environmental Setting, Impacts, and Mitigation Measures

4.2 Air Quality

objectionable odors must comply with air quality regulations, the public’s sensitivity to locally produced odors often exceeds regulatory thresholds.

The operation of the Project would not generate objectionable odors. The Project includes commercial uses only (Maximum Commercial Scenario) or commercial and residential uses (Maximum Mixed-Use Scenario), land uses that are not expected to generate objectionable odors. The Project’s commercial uses would generally include retail, office and restaurants. Odors associated with any food services would need to comply with local ordinances regarding appropriate venting of cooking areas. Therefore, the Project would have a less-than-significant odor impact because it would not create substantial objectionable odors affecting a substantial number of people.

Mitigation: None required.

Toxic Air Contaminants – Project Construction

Impact AIR-3: The Project would expose persons to substantial levels of TACs, during short-term construction activities, which may lead to adverse health effects (Criterion 4). (Significant and Potentially Unavoidable)

Project construction activities would produce DPM and PM2.5 emissions due to combustion equipment such as loaders, backhoes, and cranes, as well as haul truck trips. These emissions could result in elevated concentrations of DPM and PM2.5 at nearby receptors. These elevated concentrations could lead to an increase in the risk of cancer or other health impacts. Screening tables of the BAAQMD for assessing increased cancer risk, health indices and PM2.5 concentrations from construction activities indicated a potentially significant impact for all three of these risk and hazard categories given the size of the proposed development scenarios and the proximity of sensitive receptors. Consequently, further air modeling analysis was performed that assumed implementation of Mitigation Measure AIR-3b regarding the use of off-road diesel equipment with engines fitted with a Level 3 Verified Diesel Emissions Control (VDEC). AIR-3b sets a minimum standard for off-road diesel equipment, but a Project-specific construction plan, including equipment specifications, phasing, intensity, and duration, was not considered in the modeling analysis. Rather, the modeling analysis assumed the BAAQMD default values.

Maximum Commercial Scenario. A summary of the health impacts related to construction of the Maximum Commercial scenario is found in Table 4.2-7. The following results incorporate Mitigation Measure AIR-1a and AIR-3b.

As shown in Table 4.2-7, the maximum cancer risk for an existing residence-adult and residence-child (located to the east of the Project Site and along the delivery/haul route) would be 1.6 and 17.6 persons per million, respectively. The maximum cancer risk for the nearest school (Las Lomas High School) receptor would be 0.5 persons per million. Thus, the cancer risk due to
4.2 Air Quality

### TABLE 4.2-7
CONSTRUCTION-RELATED HEALTH IMPACTS – MAXIMUM COMMERCIAL SCENARIO

<table>
<thead>
<tr>
<th>Receptor Type</th>
<th>Cancer Risk (persons per million)</th>
<th>Chronic Impact</th>
<th>Acute Impact</th>
<th>PM2.5 Concentration (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Children</td>
<td>0.46</td>
<td>0.01</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>Existing Residence (adult/child)</td>
<td>1.55/17.6</td>
<td>0.02</td>
<td>0.07</td>
<td>0.12</td>
</tr>
</tbody>
</table>

**BAAQMD Significance Criteria**

<table>
<thead>
<tr>
<th>Significant Impact?</th>
<th>10</th>
<th>1</th>
<th>0.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

*Detailed assumptions and methodology of the HRA are included in Appendix C.*

**Source:** KBE, 2012.

Construction activities alone is above the BAAQMD threshold of 10 per million and would be significant and potentially unavoidable with mitigation.

The chronic health index (HI) would be less than 0.1 at all receptors. The chronic HI would be below the BAAQMD threshold of 1 and the impact of Project construction would be less than significant with respect to chronic health hazards. The acute HI would be less than 0.6 at all receptors. The acute HI would be below the BAAQMD threshold of 1 and the impact of Project construction would be less than significant with respect to acute health hazards.

The maximum annual PM2.5 concentrations as a result of Project construction would be 0.04 and 0.12 µg/m³ for the nearest school and the existing residences, respectively. The construction-related annual PM2.5 concentration is below the BAAQMD threshold of 0.3 µg/m³, and hence is considered less than significant.

**Maximum Mixed-Use Scenario.** A summary of the health impacts related to construction of the Maximum Mixed-Use Scenario are found in Table 4.2-8. The following results incorporate use of off-road diesel equipment with engines fitted with a Level 3 Verified Diesel Emissions Control (VDEC) as well as Mitigation Measure AIR-1a.

As shown in Table 4.2-8, the maximum cancer risk for the new residence-adult and residence-child at the Project Site (assuming overlap of Project construction and new residence habitation for one year) would be 2.4 and 26.6 persons per million, respectively. The maximum cancer risk for an existing residence-adult and residence-child (located to the east of the Project Site and along the delivery/haul route) would be 1.4 and 16.3 persons per million, respectively. The maximum cancer risk for the nearest school (Las Lomas High School) receptor would be 0.5 persons per million. Thus, the cancer risk due to construction activities alone is above the BAAQMD threshold of 10 per million and would be significant and unavoidable.
4. Environmental Setting, Impacts, and Mitigation Measures

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### TABLE 4.2-8
**CONSTRUCTION-RELATED HEALTH IMPACTS – MAXIMUM MIXED-USE SCENARIO**

<table>
<thead>
<tr>
<th>Receptor Type</th>
<th>Cancer Risk (persons per million)</th>
<th>Chronic Impact</th>
<th>Acute Impact</th>
<th>PM2.5 Concentration (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Residence (adult/child)</td>
<td>2.35/26.6</td>
<td>0.06</td>
<td>0.07</td>
<td>0.30</td>
</tr>
<tr>
<td>School Children</td>
<td>0.42</td>
<td>0.01</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>Existing Residence (adult/child)</td>
<td>1.4/16.3</td>
<td>0.02</td>
<td>0.07</td>
<td>0.11</td>
</tr>
</tbody>
</table>

*BAAQMD Significance Criteria*  
Significant Impact?  
Yes  No  No  No

---

**a** Detailed assumptions and methodology of the HRA are included in Appendix C.  

The chronic HI would be less than 0.1 at all receptors. The chronic HI would be below the BAAQMD threshold of 1 and the impact of Project construction would be less than significant with respect to chronic health hazards. The acute HI would be less than 0.1 at all receptors. The acute HI would be below the BAAQMD threshold of 1 and the impact of Project construction would be less than significant with respect to acute health hazards.

The maximum annual PM2.5 concentrations as a result of Project construction would be 0.30, 0.04, and 0.11 µg/m³ for the new residence at the Project Site, the nearest school, and the existing residences, respectively. The construction-related annual PM2.5 concentration would not exceed the BAAQMD threshold of 0.3 µg/m³, and hence is considered less than significant.

**Mitigation Measures**

**Mitigation Measure AIR-3a:** Implement Mitigation Measure AIR-1a (Construction Emission Controls).

**Mitigation Measure AIR-3b:** *Clean Diesel Engines for Construction Equipment.* The Project Applicants shall ensure that construction contract specifications include a requirement that all off-road construction equipment used for Project improvements be equipped with a Level 3 Verified Diesel Emissions Control (VDEC), which would reduce diesel particulate emissions by at least 85 percent. This measure is included in the risks calculated in Tables 4.2-7 and 4.2-8.

**Mitigation Measure AIR-3c:** *Restrict Haul Truck Routes.* Haul truck contractors exporting excavated soil shall be restricted from using Mt. Diablo Boulevard as a condition of contract. Emissions from haul trucks account for approximately 27 percent of the increased cancer risk and the majority of this increase would be from trucks travelling on Mt. Diablo Boulevard. Therefore, restricting haul trucks from using Mt. Diablo Boulevard to the extent feasible would further reduce the increased cancer risk.

**Mitigation Measure AIR-3d:** *Delayed Occupancy of Residential Units.* Exposure of occupants of new residential units proposed under the Maximum Mixed-Use Scenario to