
CITY OF DOWNEY

Downey Landing Specific Plan



Environmental Impact Report



*Prepared for the
City of Downey
1111 Brookshire Avenue
Downey, CA 90241*

February 2002



*Prepared by
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Final Program Environmental Impact Report

State Clearinghouse Number 2001031096

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Summary

Introduction

This Draft Environmental Impact Report (DEIR) discusses the environmental impacts associated with the proposed Downey Landing Specific Plan project, and related activities. This Draft EIR provides a discussion of impacts by issue area and provides mitigation measures, where appropriate. Specific issue areas discussed in this EIR include: Aesthetics, Air Quality, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services and Utilities, and Transportation and Traffic. Agricultural Resources, Biological Resources, Cultural Resources, Geology and Soils, Mineral Resources, and Recreation were determined to result in no environmental impacts, or less than significant environmental impacts. These issue areas were fully evaluated in the Revised Initial Study/Notice of Preparation (IS/NOP) for the proposed project, which is included as Appendix B to this document. An analysis of alternatives to the proposed project and long-term implications resulting from project implementation are also provided. In addition, the public review and approval process for the EIR is outlined.

Summary of Project Objectives

The objectives of the City of Downey (the Lead Agency) and the project applicants for the project are as follows:

- Develop a land use plan for a currently underutilized site, which at build-out will result in the development of a distinctive mixed-use project (i.e., retail center, television/film production facilities, business park, museum/learning center, and hospital and medical office facility) that is consistent with the goals and policies of the City's General Plan.
- Create employment opportunities that will replace the jobs that were lost with the closing of the NASA facility, with respect to both quantity and quality.
- Develop a specific plan that will ensure project compatibility with neighboring land uses through the use of land use controls and design guidelines, while providing for both employment and shopping opportunities.
- Increase and diversify the number of retail merchandise opportunities in the community for the purpose of capturing those Downey residents who are shopping elsewhere so as to reduce the City's leakage of sales tax revenue.
- Provide for the development of additional retail businesses so as to enlarge the City's retail trade area and in turn strengthen its economic base.

- Enhance the visual character of the project site, which in turn will help to strengthen the image of the community.
- Replace the project site's existing zoning districts with a mixed-use specific plan that recognizes the site's unique features and location advantages, provides for its orderly development, and attracts high-quality retailers, businesses, and technology companies.
- Provide public improvements to serve the project site and thereby ensure an improved environmental quality for onsite businesses and employees.
- Develop a built environment that reflects a high level of concern for architectural and urban design principles through a Specific Plan.
- Attract businesses that generate positive net revenues for the community to help support local services.
- Highlight the use of some of the site's existing buildings with the advantages they offer as locations for film and television production.
- Diversify and strengthen the City's economic base by attracting base-type businesses.
- Preserve that portion of Building 1 that has been designated historical.
- Prepare a specific plan that recognizes the history that occurred at the project site involving the development of NASA's Apollo and Space Shuttle programs.
- Develop a specific plan whose land use components are internally linked for pedestrian and vehicular travel.
- Replace the functionally outmoded Kaiser Bellflower hospital with new structures that meet current life safety, fire and seismic requirements for health care facilities.
- Continue to provide health care in Kaiser owned facilities to Kaiser members served by the Bellflower facility during the replacement of the Kaiser Bellflower hospital.
- Provide a consolidated and centralized medical center location for Kaiser members in the Downey/Bellflower community to receive medical care.
- Offer state-of-the-art medical care in facilities to be constructed and designed to optimize the quality of patient care in the new millennium.

Summary of Proposed Project

The proposed project consists of a Specific Plan for a mixed-use development proposal that is planned for the 160-acre former NASA site in Downey. Land uses planned for development include commercial retail, technology and business park, motion picture production, hospital, and medical office uses. Together, the project's buildings will total a maximum of approximately 3.7 million square feet (sq. ft.) of floor area in six distinct planning areas: five areas to be developed by Downey Landing, LLC and a sixth by Kaiser Foundation Hospitals. Retail uses will comprise approximately 410,000 sq. ft., and hospital/medical office and associate uses will total approximately 1.0 million sq. ft., with a 0.69 million sq. ft. parking garage. Depending on which option for development is selected, business park uses would total between 500,000 sq. ft. and 1,625,000 sq. ft. while studio uses would total between 243,000 sq. ft. and 1,121,000 sq. ft. In addition, a 50,000 sq. ft. learning center may be built on the site.

Synopsis of Alternatives

According to CEQA Guidelines Section 15126.6, the discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if the alternative would impede, to some degree, the attainment of project objectives or would be more costly. These alternatives usually take the form of no project, reduced project size, different project design, or suitable alternative project sites, and are governed by a "rule of reason," which requires the identification of only those alternatives necessary to permit a reasoned choice between the alternatives and proposed project.

Alternatives Found to Be Infeasible

As further described in Chapter 4 of the EIR, the following alternatives were found to be infeasible:

- Alternative site.
- Reduced Scale Alternative.
- No Project/Less Intense/Reasonably Foreseeable Use Alternative.

Potentially Feasible Alternative

A feasible alternative to the proposed project is summarized as follows.

No Project/No Development Alternative

In addition to alternative development scenarios, Section 15126.6(e) of the CEQA Guidelines requires the analyses of a "no project" alternative. This "no project" analysis must discuss the existing condition, as well as what would be reasonably expected to occur in the foreseeable future if

the project were not to be approved. The No Project/No Development Alternative, analyzed here, represents the *status quo*, or maintaining the project site in its current state, which is predominantly unoccupied except for interim movie industry uses of a portion of the site for production and sound stage activities. No new environmental effects would directly result from the selection of this alternative. Maintenance of the project site in the present state would allow the site to continue in its current, predominantly abandoned state. Because the site would not be developed, any significant and adverse environmental impacts directly or cumulatively associated with the proposed project would be avoided; however, this alternative would not meet the basic project objectives outlined above. Vacancy would not constitute the highest and best use of the site, which is zoned for General Manufacturing; no increased employment opportunities would be created; no additional retail merchandise shopping opportunities would be created to serve the residents of Downey and strengthen the City's economic base; the visual character of the site would not be enhanced; businesses that generate positive net revenues for the community would not be attracted to the area; and no development regulations for the site would result.

The No Project/No Development option most significantly lessens all environmental impacts associated with the proposed project, and would be considered the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the "no project" alternative is identified as environmentally superior, the EIR shall also identify an environmentally superior alternative among the other alternatives. The No Project/Less Intense/Reasonably Foreseeable Use option also lessens the environmental impacts associated with the proposed project, but does not meet basic project objectives. Therefore, although the other alternatives could reduce the environmental impacts of the proposed project, the other alternatives would not achieve basic project objectives.

Issues to be Resolved

- On-site circulation - A detailed design of these proposed improvements has not been conducted to determine if they are feasible relative to such issues as right-of-way availability and other physical constraints. Phasing of traffic related improvements and precise design requirements will be addressed as identified in the Traffic and Circulation section of this Draft EIR.

Classification of Environmental Impacts

Potential environmental impacts have been classified in the following categories:

Less Than Significant: Results in no substantial adverse change to existing environmental conditions;

Potentially Significant: Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less than significant levels by implementation of feasible mitigation measures or by the selection of an environmentally superior project alternative;

Significant and Unavoidable: Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures, or by the selection of an environmentally superior project alternative; and

Lastly, cumulative impacts are also analyzed in this environmental document. The analysis of cumulative impacts considers the impacts of the proposed project together with the impacts of other reasonably foreseeable approved and pending projects proposed for development in the vicinity.

Impact Summary Tables

Pursuant to Section 15123(b)(1) of the State CEQA Guidelines, The following tables contain a summary of significant environmental impacts associated with the proposed project, the mitigation measures proposed, and the level of significance of the impacts following the implementation of those measures. Table S-1 contains significant, unavoidable impacts, which would require a Statement of Overriding Considerations if the proposed project is approved. Table S-2 contains potentially significant impacts that can be reduced to a less-than-significant level with the mitigation measures shown in the table.

**TABLE S-1
SIGNIFICANT UNAVOIDABLE IMPACTS
(DECISION MAKERS MUST ISSUE A "STATEMENT OF OVERRIDING CONSIDERATIONS" UNDER SECTION 15093 OF THE CEQA
GUIDELINES IF THE PROJECT IS APPROVED)**

Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
Aesthetics/Lighting	Impact 3.1-1: The proposed Downey Landing, L.L.C. project would introduce a substantial source of nighttime light that could affect sensitive uses in the project vicinity.	No feasible mitigation measures would reduce light and glare impacts to less than significant levels	Significant
	Impact 3.1-2: The proposed Kaiser project would introduce a substantial source of nighttime light into the project vicinity.		
	Cumulative Impact 3.1-3: The proposed project would contribute to the exposure of residential areas in the City to increased nighttime light and glare intensities.		
Air Quality	Impact 3.2-1: Daily Demolition and Construction Emissions	Mitigation Measure 3.2-1: Develop and implement a construction management plan, as approved by the City of Downey, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:	Significant
	Impact 3.2-2: Daily Operational Emissions	<ul style="list-style-type: none"> ▪ Configure construction parking to minimize traffic interference. ▪ Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person). ▪ Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the degree practicable. ▪ Re-route construction trucks away from congested streets. ▪ Consolidate truck deliveries when possible. ▪ Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site. 	

**TABLE S-1
SIGNIFICANT UNAVOIDABLE IMPACTS
(DECISION MAKERS MUST ISSUE A "STATEMENT OF OVERRIDING CONSIDERATIONS" UNDER SECTION 15093 OF THE CEQA
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Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
		<ul style="list-style-type: none"> ▪ Maintain equipment and vehicle engines in good condition and in proper tune as per manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions. ▪ Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at 800/242-4022 for daily forecasts. ▪ Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices. ▪ Use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices. 	
		<p>Mitigation Measure 3.2-2: Implement all rules and regulations by the Governing Board of the SCAQMD which are applicable to the development of the project (such as Rule 402 - <u>Nuisance</u> and Rule 403 - <u>Fugitive Dust</u>) and which are in effect at the time of development. The following measures are currently recommended to implement Rule 403 - <u>Fugitive Dust</u>. These measures have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation.</p> <ul style="list-style-type: none"> ▪ Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more). ▪ Replace ground cover in disturbed areas as quickly as possible. ▪ Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, and dirt) according to manufacturers' specifications. ▪ Water active grading sites at least twice daily. ▪ Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour. ▪ All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code. ▪ Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available). ▪ Install wheel washers where vehicles enter and exit unpaved roads onto paved 	

**TABLE S-1
SIGNIFICANT UNAVOIDABLE IMPACTS
(DECISION MAKERS MUST ISSUE A "STATEMENT OF OVERRIDING CONSIDERATIONS" UNDER SECTION 15093 OF THE CEQA
GUIDELINES IF THE PROJECT IS APPROVED)**

<u>Resource</u>	<u>Impact Description</u>	<u>Recommended Mitigation Measure</u>	<u>Residual Impact</u>
		roads, or wash off trucks and any equipment leaving the site each trip.	
		<ul style="list-style-type: none"> ▪ Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces. ▪ Enforce traffic speed limits of 15 miles per hour or less on all unpaved roads. 	
		Mitigation Measure 3.2-3: All new structures constructed on the Downey Landing, L.L.C. project site shall utilize solar or low emission water heaters to reduce natural gas consumption and emissions.	
		Mitigation Measure 3.2-4: All new structures constructed on the site shall have wall and attic insulation that exceeds current Title 24 requirements by at least five (5) percent.	
		Mitigation Measure 3.2-5: The site plans developed for the project shall incorporate transit shelters and benches at appropriate locations along the site perimeter. The transit stops shall include route signs and displays.	
		Mitigation Measure 3.2-6: The site plans developed for the project shall incorporate street lighting that illuminates pedestrian pathways.	
		Mitigation Measure 3.2-7: The landscape plans developed for the project shall identify the location of shade trees to shade on-site sidewalks.	
		Mitigation Measure 3.2-8: The site plans developed for the project shall incorporate street furniture along on-site pedestrian pathways.	
		Mitigation Measure 3.2-9: The site plans developed for the project shall incorporate pedestrian safety designs and infrastructure at street/driveway crossings.	
		Mitigation Measure 3.2-10: The site plans developed for the project shall incorporate secure bicycle parking features.	
		Mitigation Measure 3.2-11: The site plans developed for the non-commercial areas	

**TABLE S-1
SIGNIFICANT UNAVOIDABLE IMPACTS
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GUIDELINES IF THE PROJECT IS APPROVED)**

Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
Hazards and Hazardous Materials	None.	of the project shall designate preferential parking spaces for carpool/vanpool parking. None.	N/A
Hydrology and Water Quality	None.	None.	N/A
Land Use and Planning	None.	None.	N/A
Noise	None.	None.	N/A
Population and Housing	None.	None.	N/A
Public Services and Utilities	None.	None.	N/A
Transportation and Traffic	The Congestion Management Program (CMP) impact on the Century Freeway (I-105) during the morning and afternoon peak periods would be significant unavoidable traffic impacts that are anticipated to result from the proposed project.	There are no feasible project-related mitigation measures available for this impact.	Significant

**TABLE S-2
SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED
(DECISION MAKERS MUST MAKE "FINDINGS" UNDER SECTION 15091 OF THE CEQA GUIDELINES IF THE PROJECT IS APPROVED).**

Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
Aesthetics/Lighting	None.	None.	N/A
Air Quality	None.	None.	N/A
Hazards and Hazardous Materials	<p>Impact 3.3-1: Construction of the proposed project could expose workers to previously undetected pockets of contaminated soils.</p> <p>Impact 3.3-2: Demolition and/or renovation of existing structures on the project site could expose workers and the environment to asbestos-containing materials (ACM).</p> <p>Impact 3.3-3: Demolition and/or renovation of existing structures on the project site could expose workers and the environment to lead-based paint waste and residues.</p> <p>Impact 3.3-4: Construction of the proposed Kaiser project could expose individuals to an increased health risk associated with exposure to contaminated soils.</p> <p>Impact 3.3-5: Operation of the proposed Kaiser project could expose individuals to an increased health risk associated with the use, storage, construction workers during work in areas where contaminated soils have</p>	<p>Mitigation Measure 3.3-1: Compliance with applicable plans and policies. The Applicant and the City shall comply with all applicable Federal, State and local plans and policies regarding hazardous substances and contaminant remediation including, but not limited to the applicable provisions of the Toxic Substances Control Act (TSCA), the Asbestos Hazard Emergency Response Act (AHERA), the California Health and Safety Code, the California Hazardous Waste Control Law, and other applicable provisions of the California Code of Regulations (CCR), as well as applicable regulations promulgated by the U.S. and California Occupational Safety and Health Administrations (OSHA) and Environmental Protection Agency (EPA).</p> <p>Mitigation Measure 3.3-2: Formulation of a procedure to be implemented in the event of discovery of previously unknown pockets of contaminated soils. Prior to issuance of a grading permit, the City of Downey shall, in consultation with and with the approval of the RWQCB, formulate a plan to be implemented in the event that grading or excavation activities during construction expose potentially contaminated soils (e.g. soils that exhibit staining or odors). At a minimum, the plan shall identify the RWQCB as a responsible agency, and shall include the following specific points:</p> <ul style="list-style-type: none"> ▪ A qualified construction monitor shall be designated and shall be present on-site during grading and excavation activity. ▪ The construction monitor shall be responsible for identifying pockets of potentially contaminated soils, and, upon identification of potential contaminants, for implementing the procedures outlined in the plan ▪ All work in the vicinity of the affected area shall cease. ▪ The Los Angeles RWQCB shall be contacted. ▪ The appropriate California Health and Safety Code procedures shall be followed. <p>The plan shall also identify a procedure for sampling, testing, and remediation, as appropriate, of contaminated soils, and for obtaining the concurrence of and necessary clearance from the RWQCB, before construction activities can resume. The plan shall also provide for the preventative procedures for the protection of construction workers during work in areas where contaminated soils have</p>	<p>Less Than Significant</p>

**TABLE S-2
SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED
(DECISION MAKERS MUST MAKE "FINDINGS" UNDER SECTION 15091 OF THE CEQA GUIDELINES IF THE PROJECT IS APPROVED).**

Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	transportation, and disposal of hazardous substances	previously been discovered.	
	<p>Cumulative Impacts. For the purposes of this analysis, cumulative impacts are evaluated on a City-wide level, since exposure of contaminated soils or the potential localized release of asbestos or lead-based paint waste are likely to remain contained.</p> <p>Construction activities associated with the proposed project could expose workers to lead-based paint, ACM, and undetected pockets of contaminated soils; however, as described above in Section 3.3.5, Mitigation Measures 3.3-1 and 3.3-2 require compliance with applicable procedures to minimize exposure to and release of these materials. Because the possible risks associated with construction activities would be minimized (i.e., reduced to a less-than-significant level), the project's contribution to risks associated with the construction-related release of or exposure to hazardous materials would not be cumulatively considerable, and this cumulative impact</p>	<p>Mitigation Measure 3.3-3: Preparation of a Phase II Environmental Site Assessment for the Proposed Kaiser project site.</p> <p>Prior to issuance of a grading permit, Kaiser shall retain a qualified consultant to prepare a Phase II Environmental Site Assessment (ESA), for review and approval by the City Planning Department or its qualified designee, and shall demonstrate, to the City's satisfaction, that Kaiser has implemented all applicable recommendations of the Phase II ESA.</p>	

**TABLE S-2
SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED
(DECISION MAKERS MUST MAKE "FINDINGS" UNDER SECTION 15091 OF THE CEQA GUIDELINES IF THE PROJECT IS APPROVED).**

Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	<p>would be less than significant.</p> <p>The proposed Kaiser project would routinely use and transport hazardous substances and would generate chemical and biological waste. However, as described above in Section 3.3.3, the Kaiser facility would be regulated by federal, State, and local agencies, and would be required to comply with all applicable provisions of the statutes and regulations listed in Table 3.3-1. Additionally, as described in Section 3.3.5, Mitigation Measure 3.3-1 would reduce risks associated with operation activities to less-than-significant levels. Therefore, despite the site of the project, the project's contribution to an increased risk of construction-related and operational hazards would not be cumulatively considerable, and would therefore be less than significant.</p>		
Hydrology and Water Quality	<p>Impact 3.4-1: The calculated increase in runoff for the entire site due to construction of the project is approximately 20.2 cfs (278.0 cfs to 298.2 cfs), which is about 7.5% (see Table 3.4-1 below). Most of this increase</p>	<p>Mitigation Measure 3.4-1: Prior to issuance of a grading permit, a final grading plan, final drainage plan, and final hydrologic/hydraulic analysis shall be submitted to the City of Downey for review and approval. Final design of the project storm drain system shall be consistent with the recommendations of the final hydrologic/hydraulic analysis and in conformance with the requirements of the City of Downey.</p>	Less Than Significant

**TABLE S-2
SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED
(DECISION MAKERS MUST MAKE "FINDINGS" UNDER SECTION 15091 OF THE CEQA GUIDELINES IF THE PROJECT IS APPROVED).**

Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	can be attributed to the increase in watershed area from the existing site of approximately 6 acres (134 acres to 142 acres), or an increase of almost 6%.	<p>Mitigation Measure 3.4-2: Prior to the issuance of grading permits for each phase, the applicant shall submit and obtain approval of construction drainage and erosion control plans for each phase of grading. The control measures contained in the plan shall be approved by the City of Downey prior to any construction activities. The plans shall serve as the basis for the construction portion of the SWPPP and shall include the applicable measures such as the following:</p> <ul style="list-style-type: none"> ▪ Diversion of offsite runoff away from the construction site; ▪ Prompt revegetation of proposed landscaped areas; ▪ Perimeter sandbagging or temporary basins to trap sediment; ▪ Regular sprinkling of exposed soils during construction phases; ▪ Installation of a minor retention basin(s) to alleviate discharge of increase flows; ▪ Specifications for construction waste handling and disposal; and, ▪ Erosion control measures maintained throughout the construction period. 	
	<p>Impact 3.4-2: Grading and construction activities on the project site have the potential to result in short-term adverse water quality impacts. These activities may increase erosion and contribute sediment to surface waters. Additionally, improper handling of construction materials and/or equipment may result in accidental spills that could adversely affect water quality.</p>	<p>Mitigation Measure 3.4-3: Prior to the issuance of a grading permit, the project applicants shall file a Notice of Intent (NOI) with the State and comply with the requirements of the NPDES General Construction Permit, including the preparation of a SWPPP and a SUSMP incorporating BMPs for construction and post-construction control of runoff. The SWPPP and SUSMP shall be prepared by a Civil or Environmental Engineer for review and approval by the City of Downey. The plans shall reduce the discharge of pollutants to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and such other provisions that are appropriate. The plans shall include applicable post-construction measures such as the following:</p> <ul style="list-style-type: none"> ▪ Control of impervious area runoff, including installation of detention basins, retention areas, filtering devices, energy dissipaters, pervious drainage systems, porous pavement alternatives; ▪ Implement regular sweeping of impervious surfaces such as parking lots and entry drives; ▪ Use of efficient irrigation practices; ▪ Provision of infiltration trenches and basins; ▪ Linings for urban runoff conveyance channels; ▪ Vegetated swales and strips; ▪ Protection of slopes and channels; ▪ Landscape design such as xeriscape or other design minimizing use of fertilizers; 	
	<p>Impact 3.4-3: The proposed project has the potential to result in long-term adverse impacts to water quality due to the addition of pollutants typical of urban runoff. Additional automobile traffic generated from the proposed use of the site, as compared to the current use, could result in an increased incremental concentration of urban contaminants in storm runoff.</p>	<p>Cumulative Impacts. The</p>	

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Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	<p>scope of the cumulative analysis for the drainage impacts is limited at this point to site specific impacts and the ability of the project to mitigate these impacts. As discussed earlier, the City's Water Master Plan is not available at this time. However, the project's impact upon the City's Water system and demand will be mitigated to a less than significant level by Mitigation Measure 3.4-1. The scope of the cumulative analysis for water quality impacts is governed by the SUSMPS adopted by City ordinance. The project's contribution to water quality impacts can be mitigated to a less than significant level. Therefore, water quality impacts from a cumulative perspective can also be mitigated to a less than significant level.</p>	<ul style="list-style-type: none"> ▪ Minimize storm water runoff through site design; and, ▪ Minimize outdoor storage, including trash container areas. <p>Mitigation Measure 3.4-4: Prior to the issuance of building permits for the project, the project applicants shall implement conditions of the City of Downey regarding storm drainage improvements that shall include, but not be limited to:</p> <ul style="list-style-type: none"> ▪ Construct the necessary storm drainage improvements (including detention basins if needed) to handle increased flows and provide BMPs. 	
Land Use and Planning	None.	None.	N/A
Noise	Construction Noise Level: Use of construction equipment would generate both steady state and episodic noise that would be heard both on and off	<p>Mitigation Measure 3.6-1: The project developer shall incorporate the following best management practices for noise control of demolition and construction activities into the construction documents to be implemented by all project contractors:</p> <ul style="list-style-type: none"> ▪ Maximize the physical separation between noise generators and noise receptors. Such separation includes, but is not limited to, the following measures: provide 	Less Than Significant

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(DECISION MAKERS MUST MAKE "FINDINGS" UNDER SECTION 15091 OF THE CEQA GUIDELINES IF THE PROJECT IS APPROVED).**

Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	the project site.	enclosures for stationary equipment and barriers around particularly noisy areas on the site or around the entire site; use shields, impervious fences, or other physical sound barriers, to inhibit the transmission of noise to sensitive receptors; and position stationary equipment to minimize noise impacts on the community;	
Studio Noise Sources	Sources of noise including peoples voices, loudspeakers, mechanical equipment, and even staged explosions could exceed the City's adopted Municipal Code noise standards at the Kaiser hospital and nearby residential properties.	<ul style="list-style-type: none"> ▪ Require that all construction equipment engines be properly tuned and muffled according to manufacturers' specifications; ▪ Select haul routes for the removal of excavation materials and transport of building materials in conjunction with the City of Downey such that noise-sensitive (e.g., residential) areas are avoided as much as possible; and ▪ Neighbors within 500 feet of construction areas shall be notified of the construction schedule in writing, prior to construction. The project sponsor shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise. The coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented. A telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site. ▪ Construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m. with no construction allowed on Sunday. 	N/A
Population and Housing	None.	None.	N/A
Public Services and Utilities	<p>Impact 3.8-1: The proposed project could result in a potentially significant impact to the City's domestic water system and supply.</p> <p>Impact 3.8-2: The proposed project will have a significant impact on the infrastructure of the reclaimed water system serving the City of Downey.</p>	<p>Mitigation Measure 3.8-2: Prior to the issuance of building permits, the project applicants shall obtain the appropriate clearances from the City of Downey and the County Sanitation Districts of Los Angeles County regarding proposed wastewater improvements to ensure that adequate wastewater capabilities are available at all proposed points of connection. These improvements include, but are not limited to,</p> <ul style="list-style-type: none"> • Design and install all on-site and off-site sanitary sewer improvements required for the project. <p>Mitigation Measure 3.8-2: Prior to the issuance of building permits, the project applicants shall obtain the appropriate clearances from the City of Downey and the County Sanitation Districts of Los Angeles County regarding proposed wastewater</p>	Less Than Significant
Impact 3.8-3:	It is anticipated		

**TABLE S-2
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Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	<p>that the proposed project will generate additional demands for fire service water as compared to the existing under-utilized site.</p>	<p>improvements to ensure that adequate wastewater capacities are available at all proposed points of connection. These improvements include, but are not limited to, Design and install all on-site and off-site sanitary sewer improvements required for the project.</p>	
	<p>Impact 3.8-4: It is anticipated that the proposed project will generate additional demands for electricity as compared to the existing under-utilized site.</p>	<p>Mitigation Measure 3.8-3: The City of Downey is the water purveyor in and for the City. Prior to final design, the project applicants shall provide estimated water usage requirements, on a summer and winter basis, to the Public Works Department for review. In the event that project demand exceeds the City's ability to provide adequate potable water to the project, the project applicants shall be responsible for all costs associated with providing both the supply and infrastructure that will ensure adequate water supply to the site.</p>	
	<p>Impact 3.8-5: It is anticipated that the proposed project will generate an increased demand for natural gas.</p>	<p>Mitigation Measure 3.8-4: Prior to the issuance of building permits, the project applicants shall implement conditions of the City of Downey regarding domestic water improvements that shall include, but not be limited to:</p> <ul style="list-style-type: none"> ▪ Design and install an on-site public water loop system that joins the main water lines on Lakewood, Bellflower, Imperial Highway, Stewart & Gray Road, and Clark. 	
	<p>Impact 3.8-6: It is anticipated that the proposed project will generate an additional demand for schools that are already overcrowded.</p>	<p>Mitigation Measure 3.8-5: Prior to issuance of building permits, the project applicants shall coordinate with the City of Downey and the Central Basin Water District to:</p> <ul style="list-style-type: none"> ▪ Design and install a double-piping system in or around the proposed buildings as feasible for the use of reclaimed water for non-potable plumbing, landscaping, cooling towers and industrial uses per Sections 13550-13556 of the California Water Code. 	
	<p>Impact 3.8-7: It is anticipated that the proposed project will generate an additional demand for police protection.</p>	<p>Mitigation Measure 3.8-6: Prior to the issuance of building permits for the project, the project applicants shall obtain the appropriate clearances from the City of</p>	
	<p>Cumulative Impacts. Infrastructure capacity for utilities and other public services is a regional problem due to recent and projected population increases in the Southern California area. This</p>	<p>Design and install, with the approval of the City Department of Public Works, any necessary reclaimed water extension along Imperial Highway and/or Lakewood Boulevard and/or from Independence Park in order to service the proposed project. Each applicant is to bear its proportionate share of costs for any necessary reclaimed water extension.</p>	

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Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	<p>population increase creates additional demand for public services, which may already be at or near capacity. It has been determined that, with implementation of recommended mitigation measures, all project-specific impacts to public services can be reduced to a less-than-significant level. The Lead Agency has consequently determined that the contribution of the proposed project to cumulative public services impacts in the Los Angeles County Southeast Subregion (Gateway Cities Subregion) would be less than cumulatively considerable.</p>	<p>Downey and the Central Basin Municipal Water District regarding proposed reclaimed water improvements to insure that adequate reclaimed water services are maintained and provided including:</p> <ul style="list-style-type: none"> ▪ Submit a final reclaimed water usage analysis plan and final public reclaimed water extension plan. <p>Mitigation Measure 3.8-7: Prior to the issuance of building permits, the project applicants shall implement conditions of the City of Downey regarding reclaimed water improvements that shall include, but not be limited to:</p> <ul style="list-style-type: none"> ▪ Construct the necessary reclaimed water extension along Imperial Highway and/or Lakewood Boulevard and/or from Independence Park in order to service the proposed project. Each applicant is to bear its proportionate share of costs for any necessary reclaimed water extension. ▪ Design and install the reclaimed water on-site landscape irrigation system. ▪ Prepare landscape plans utilizing drought-tolerant landscape. <p>Mitigation Measure 3.8-8: Prior to approval of the final map, the project applicants shall coordinate with the City of Downey Public Works and Fire Department to:</p> <ul style="list-style-type: none"> ▪ Determine current fire flow data based on specific project plans; determine fire flow, on-site fire hydrant and building sprinkler requirements for each portion of the project. ▪ Certify existing building sprinkler systems and/or required modifications, if any. ▪ Develop an interim fire system plan to provide protection during demolition of the current on-site system, including removal of existing pump houses. ▪ Prior to issuing building permits, design and install a new permanent fire system to provide protection for the site. All onsite fire service water shall be interconnected with available City water sources around the project site. 	
		<p>Mitigation Measure 3.8-9: Prior to issuance of building permits, the project applicants shall submit a final on-site fire system plan to the City of Downey Public Works Department and the Fire Department for review and approval.</p>	
		<p>Mitigation Measure 3.8-10: Business tenants shall develop and implement</p>	

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Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
		<p>appropriate recycling programs. The recycling programs shall be subject to review and approval by the City Public Works Department prior to issuance of an occupancy permit. Further, prior to the issuance of occupancy permits, business tenants shall demonstrate, to the satisfaction of the City Public Works Department, the installation of appropriate trash compaction devices to reduce the volume of solid waste going to area landfills.</p> <p>Mitigation Measure 3.8-11: Business tenants shall develop and implement energy-conservation programs. These conservation programs shall be subject to review and approval by the City Public Works Department prior to issuance of an occupancy permit.</p> <p>Mitigation Measure 3.8-12: Prior to issuance of building permits, the applicants shall pay the School District all required school fees.</p> <p>Mitigation Measure 3.8-13: Prior to issuance of occupancy permits, the project applicants shall complete an analysis of projected employee populations over a 24-hour (weekday) period to determine applicable shifts/periods of time to which police personnel could be added to maintain the current standard of 1.07 police officers per 1,000 population. The project applicants are obligated to pay fees for any additional police personnel determined to be required after such determination is made and shall enter into an agreement with the City of Downey and the DPD for payment of such fees.</p> <p>Mitigation Measure 3.8-14: Prior to the issuance of occupancy permits, the project applicants shall each draft an on-site security plan for the development to be reviewed by the City of Downey and the Downey Police Department.</p>	Less than Significant
Transportation and Traffic	<p>Impact 3.9-1: Traffic generated by the proposed project would result in an increase of 0.02 or greater in the ICU value for intersections that are projected to operate at Level of Service E or F.</p>	<p>Mitigation Measure 3.9-1: Provide a Second Northbound-to-Westbound Left-Turn Lane on Lakewood Boulevard at the Lakewood/Firestone Intersection, -OR- Provide Right-Turn Lanes in the Northbound, Southbound, and Eastbound Directions and Double Left-Turn Lanes in the Eastbound and Westbound Directions, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic</p>	Less than Significant

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SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED
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Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
	<p>Impact 3.9-2: Traffic generated by the proposed project would result in a significant impact on the Century Freeway (I-105) between Bellflower Boulevard and the I-605 Freeway during the morning and afternoon peak hours based on the criteria in the LA County Congestion Management Program (CMP).</p>	<p>signal coordination system that the City may ultimately install at this location.</p> <p>Mitigation Measure 3.9-2: Provide an Additional Northbound Through Lane on Lakewood Boulevard at the Lakewood/Bellflower Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.</p>	
		<p>Mitigation Measure 3.9-3: Provide an Additional Northbound and Southbound Through Lane on Lakewood Boulevard at the Lakewood/Stewart & Gray Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.</p>	
		<p>Mitigation Measure 3.9-4: Provide an Additional Westbound-to-Southbound Left-Turn Lane on Imperial Highway at the Lakewood/Imperial Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.</p>	
		<p>Mitigation Measure 3.9-5: Provide an Eastbound-to-Southbound Right-Turn Lane on Imperial Highway at the Imperial/Bellflower Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.</p>	

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Resource	Impact Description	Recommended Mitigation Measure	Residual Impact
		that the City may ultimately install at this location.	
		<p>Mitigation Measure 3.9-6: Provide a Southbound-to-westbound Right-Turn Lane on Bellflower Boulevard at the Bellflower/Stewart and Gray Intersection , as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.</p>	
		<p>Mitigation Measure 3.9-7: Prepare a Phased Mitigation Plan to link the specific mitigation measures (Measures 3.9-1 through 3.9-6) with the various levels and/or combinations of development that are anticipated for the development , as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at these locations.</p>	

1.0 Introduction

1.1 Overview of the Proposed Project

The proposed project consists of a Specific Plan, rezoning, and other discretionary approvals for the redevelopment of a 160-acre property located at 12214 Lakewood Boulevard, Assessor's Parcel Number (APN) 6256-004-900, in the City of Downey, California, bounded on the west by Lakewood Boulevard and Clark Avenue, on the east by Bellflower Boulevard, on the north by Stewart & Gray Road, and on the south by Imperial Highway. The project site currently contains the vacant buildings formerly operated by North American Rockwell and the Boeing Company which manufactured and supported components of manned space flight programs, including the Apollo and Space Shuttle programs, under the direction of the National Aeronautics and Space Administration (NASA). Most of the 124 vacant NASA structures on-site would be demolished to allow for a maximum of approximately 3.7 million square feet (msf) of development (of which 3.1 msf would generate traffic) by two applicants in six distinct land areas. The improvements proposed for each area are described below.

Area I

Downey Landing, LLC Area I encompasses slightly more than 34 acres and occupies the northern portion of the project site. A planned retail shopping center would occupy this area, and would be oriented toward Lakewood Boulevard and Stewart & Gray Road. The other street bordering Area I is Bellflower Boulevard. The center will feature both inline stores and freestanding buildings. Together, the center's buildings will provide a maximum of 410,000 square feet (sq. ft.), plus parking.

Area II

Downey Landing, LLC Area IIA would total up to 19 acres and occupy the western central portion of the site, fronting on Lakewood Boulevard. The development proposal involves either reusing current buildings for motion picture studio and production space or other adaptive reuse, or demolishing the majority of the building in favor of approximately 444,500 sq. ft. of technology and business park uses. Parking would be provided to serve these anticipated uses. The latter option would generate the highest traffic counts and is therefore the option examined in the EIR, to provide a conservative environmental analysis.

Downey Landing, LLC Area IIB would total up to 21 acres and would occupy the central portion of the site. The development proposal involves either reusing current buildings for motion picture

studio and production space or other adaptive reuse, or demolishing the majority of the building in favor of approximately 243,000 sq. ft. of industrial uses. Parking would be provided to serve these anticipated uses. The latter option would generate the highest traffic counts and is therefore the option examined in the EIR, to provide a conservative environmental analysis.

Downey Landing, LLC Area IIC would total up to 22 acres. Area IIC fronts the intersection of Clark Avenue and Lakewood Boulevard, directly south of Area IIA. It supports an existing building (Building 1) that contains 913,023 sq. ft., which both Rockwell and the Boeing Company used for aerospace manufacturing and testing purposes. The development proposal involves either reusing current buildings for motion picture studio and production space or other adaptive reuse, or demolishing the majority of the building in favor of approximately 384,800 sq. ft. of technology and business park uses. Parking would be provided to serve these anticipated uses. The latter option would generate the highest traffic counts and is therefore the option examined in the EIR, to provide a conservative environmental analysis.

Downey Landing, LLC Area IID would be developed as an office park. It would encompass 28 acres and occupy the eastern central portion of the project site; plans show Area IID would front on Bellflower Boulevard. Planned improvements consist of 2-story office buildings for a combined maximum of 516,200 sq. ft. Open/green space uses will be interspersed throughout the project site, as well. Construction of each phase is anticipated to span 10 months. Area II is currently under temporary use by several motion picture production companies, and if Buildings 1, 9, 11, 14, 39, 288 and 6/290 are kept externally intact and reused, their reoccupancy would occur concurrently with construction of Area I. In the case of demolition of Buildings 1, 9, 11, 14, 39, 288, and 6/290, Areas I would be developed first, Area III second, and Area II last. Construction staging is anticipated to occur on-site.

Area III

Kaiser portion of Area III- According to the development proposal submitted by Kaiser, this portion of the project would develop 1.0 msf of hospital, medical office buildings, and associate uses and .69 msf of structured parking on 30 acres of land. The proposed Kaiser project is a replacement for Kaiser's existing 8-story hospital tower in the City of Bellflower. Proposed improvements include a new 6-story 680,000 square foot hospital building with a planned capacity of 351 beds; new, four-story, 292,700 square feet of medical office buildings, a 27,300-square-foot central plant, and a six-level, 681,550-square-foot parking structure. It should be noted that the hospital building may be up to eight stories, provided that total square footage does not exceed 680,000. Development of a seven- or eight- story hospital building would not induce environmental impacts beyond those of a six-story building. Construction would be phased over a period of about ten years. The specific components of each phase are tentative; however, development would not exceed 1.0 million sq. ft.

for the hospital and medical office building uses and 681,550 sq. ft. parking structure, and phasing variations would not affect the analysis presented in this EIR.

Park/School/Learning Center portion of Area III- The westernmost 13-acre portion of Area III, which abuts Clark Avenue, is being reserved for the Downey Unified School District for use as a school/park/learning center; however, neither the Specific Plan nor this EIR will entitle or provide environmental clearance for development of any school, and the District would be required to initiate a separate environmental process if it chooses to develop the site. A 50,000 sq. ft. learning center may be located on this 13-acre site.

1.2 Purpose of the EIR

This Draft Program Environmental Impact Report (Draft EIR) has been prepared to meet all of the substantive and procedural requirements of the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code Section 21000 *et seq.*), the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 *et seq.*, as amended through January 1, 2001) and the rules, regulations and procedures for implementation of CEQA as adopted by the City of Downey. The City of Downey is the Lead Agency for this project, taking primary responsibility for conducting the environmental review and approving or denying the Specific Plan under consideration.

Before beginning the preparation of an EIR, the lead agency must decide which specific issues should be evaluated in the document. CEQA and the CEQA Guidelines mandate various steps that lead agencies must take to define the scope and contents of an EIR, and also give lead agencies discretion to use additional "scoping" methods. For this project, the primary tool used to determine the scope of this DEIR was the Initial Study.

As allowed by Section 15063 of the CEQA Guidelines, the Initial Study may be used to simplify preparation of an EIR by narrowing the scope of the issues to be evaluated. Therefore, the Initial Study may be used to:

- Focus the EIR on environmental effects determined to be significant;
- Identify effects that are not significant;
- Explain why potentially significant effects were determined not to be significant; and
- Identify whether a program EIR, tiering, or other process can be used for the environmental analysis.

Under the statute, EIRs should focus their discussion on potentially significant impacts, and may limit discussion of other impacts to a brief explanation of why the impacts are not potentially significant. Under the Guidelines, environmental effects that were dismissed in an initial study need

not be discussed in the EIR unless the agency later receives information that is inconsistent with the findings of the initial study. This process results in a focused, or limited-topic EIR, such as this document.

This EIR has been prepared to identify any potentially significant environmental impacts associated with the implementation of the proposed project, as well as appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these impacts. According to PRC Section 21081, the Lead Agency must make specific Findings of Fact ("Findings") before approving the Final EIR, when the Draft EIR identifies significant environmental impacts that may result from a project. The purpose of the Findings is to establish the link between the contents of the Final EIR and the action of the Lead Agency with regards to approval or rejection of the project. Prior to approval of a project, one of three findings must be made:

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

Additionally, according to PRC Section 21081.6, for projects in which significant impacts will be avoided by mitigation measures, the Lead Agency must include in its Findings a mitigation monitoring program ("MMP"). The purpose of the MMP is to ensure compliance with required mitigation during implementation of the project.

However, environmental impacts may not always be mitigated to a level considered less than significant: such impacts are considered significant and unavoidable. If a public agency approves a project that would result in significant and unavoidable environmental impacts, the agency shall state, in writing, the specific reasons for approving the project, based on information contained within the Final EIR, as well as any other information in the public record. The resulting document is called a Statement of Overriding Considerations, and serves to clearly state the proposed project's benefits when weighed against its unavoidable environmental risks. The public agency prepares the Statement of Overriding Considerations, if required, after completion of the Final EIR, but before project approval according to CEQA Guidelines Sections 15091 and 15093. As further guidance, in *Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County* (1990, 52 Cal.3d 553), the California Supreme Court stated that:

the wisdom of approving any development project, a delicate task which requires a balancing of interest, is necessarily left to the sound discretion of the local officials and their

constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced.

Therefore, this document is intended to serve as an informational document, as stated in Section 15121(a) of the CEQA Guidelines:

An EIR is an informational document which will inform public agency decisionmakers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.

Furthermore, this EIR will constitute the primary source of environmental information for the lead, responsible, and trustee agencies to consider when exercising any permitting authority or approval power directly related to implementation of the proposed project.

1.3 Definition of a Program Environmental Impact Report

A Program EIR, as defined within Section 15168 of the CEQA Guidelines, is an EIR which:

may be prepared on a series of actions that can be characterized as one large project and are related either (1) Geographically, (2) As logical parts in the chain of contemplated actions, (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The use of a Program EIR enables a Lead Agency to examine the overall effects of a proposed course of action that is far-reaching, yet related in some fashion. Program EIRs contain less detail than typical development project EIRs because the level of detail in the impact analysis can only reflect the level of detail in the program description itself. There is no requirement that a particular level of specificity be provided in such a document; instead, Section 15151 of the CEQA Guidelines states that an EIR (regardless of the type):

should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and good faith effort at full disclosure.

As stated in Section 15168(b) of the CEQA Guidelines, the use of a Program EIR can provide the following advantages: (1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action; (2) Ensure consideration of cumulative impacts that might otherwise be missed in a case-by-case analysis; (3) Avoid duplication of basic policy considerations; (4) Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures when the agency has greater flexibility to deal with basic problems or cumulative impacts; and (5) Allow reduction in paperwork.

The degree of specificity provided in a programmatic environmental analysis can vary. The critical factor is that each known or anticipated individual project component is evaluated within a Program EIR and/or through the completion of subsequent environmental analysis which discloses all environmental consequences associated with program implementation.

1.4 Scope of the EIR

This Draft EIR addresses the potential environmental effects of the proposed project. The scope of the Draft EIR includes issues identified by the City of Downey during the preparation of the Initial Study (IS) and Notice of Preparation (NOP) for the proposed project and comment letters received during the IS/NOP review period. The IS/NOP and comment letters received during the NOP review period are included in Appendix A of this Draft EIR. Based on this information, the Lead Agency has determined that implementation of the proposed project may result in potentially significant impacts. Chapter 3.0 discusses the following environmental issues:

- Aesthetics;
- Air Quality;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Services and Utilities; and
- Transportation and Circulation.

In accordance with Section 15063(c)(3)(B) of the State CEQA Guidelines, the IS/NOP (Appendix A) assists in the preparation of an EIR by identifying effects determined not to be significant, as determined by a brief environmental analysis, supported by evidence. The IS/NOP determined that the following effects are not significant, and this Draft EIR does not discuss them further:

- Agricultural Resources;
- Biological Resources;
- Cultural Resources;
- Geology and Soils; and
- Mineral Resources.

1.5 Environmental Review Process

As a first step in complying with the procedural requirements of CEQA, the City prepared an IS to determine whether any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment and, if so, to narrow the focus (or scope) of the environmental analysis. For this project, the IS indicated that an EIR would be the appropriate type of environmental document to address potential environmental impacts resulting from project planning, implementation, and operation.

After completion of the IS, the City filed an NOP with the California Governor's Office of Planning and Research as an indication that an EIR would be prepared. In turn, the first IS/NOP, which address only the impacts anticipated from the Downey Landing, LLC portion of the project, was distributed for a 30-day public review period, which began on March 20, 2001 and ended on April 19, 2001. Subsequently, the project was amended to include the Kaiser portion of the project, and the IS/NOP was revised and recirculated from June 18, 2001 to July 19, 2001. The purpose of the public review periods was to solicit comments on the scope and content of the environmental analysis to be included in the Draft EIR. The City received comment letters on the IS/NOPs from the following agencies and individuals:

- Governor's Office of Planning and Research
- Southern California Gas Company
- County Sanitation Districts of Los Angeles County
- California Department of Toxic Substances Control
- Southern California Association of Governments
- Metropolitan Transportation Authority
- California Native American Heritage Commission
- South Coast Air Quality Management District
- County of Los Angeles Department of Public Works
- California Division of Mines and Geology

The IS/NOPs and their respective comment letters are included in Appendices A and B of this Draft EIR.

During the preparation of the Draft EIR, agencies, organizations, and persons who the City believed may have an interest in this project were specifically contacted. Information, data, and observations from these contacts are included in the Draft EIR. Agencies or interested persons who did not respond during the public review period of the IS/NOP will have an opportunity to comment during the public review period of the Draft EIR, as well as at subsequent hearings on the project.

1.6 Intended Use of the EIR

As previously mentioned, this Draft EIR is intended to provide the Lead Agency, interested public agencies, and the public with information which enables them to intelligently consider the environmental consequences of the proposed action. EIRs not only identify significant or potentially significant environmental effects, but also identify ways in which those impacts can be reduced to less-than-significant levels, whether through the imposition of mitigation measures or through the implementation of specific alternatives to the project. In a practical sense, EIRs function as a technique for fact-finding, allowing an applicant, concerned citizens, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure.

To gain the most value from this report, certain key points should be kept in mind:

- This report should be used as a tool to give the reader an overview of the possible ramifications of the proposed project. It is designed to be an “early warning system” with regard to potential environmental impacts.
- A specific environmental impact is not necessarily irreversible or permanent. Most impacts, particularly in urban, more developed areas, can be wholly or partially mitigated by incorporating changes recommended in this report during the design and construction phases of project development.

1.7 Required Approvals

This Draft EIR will be used in connection with permits and other discretionary approvals necessary for implementation of the proposed project. The proposed project may require the following discretionary approvals by the City of Downey:

1.7.1 Requested Approvals

- Adoption of the Downey Landing Specific Plan, No. SP-01-1.
- Rezoning of the Specific Plan Area.

- Approval of subdivision maps and uses normally requiring conditional use permits should be clearly approved as part of the Specific Plan (i.e. hospital use) and should not be required to obtain as separate entitlement. Such approval should be clearly stated in the Specific Plan.
- Approval of Development Agreements. The City will enter into Development Agreements with Downey Landing, LLC and Kaiser Permanente. The enabling legislation for Development Agreements is provided for in Section 65864 and 65865 of the California Government Code. The development agreements will define the specific nature and improvements of the proposed project, specifies permitted uses, density of development, intensity of uses, maximum heights, parking, landscaping, signing and other standards, terms and conditions necessary to promote the orderly development of the project. The City Council must approve the Development Agreements.

1.7.2 Other Agencies Whose Approval is Required

In addition to the lead agency, there are also local, state, and federal responsible agencies who have discretionary or appellate authority over specific aspects of the proposed project. The responsible agencies will also rely on this Draft EIR when acting on those aspects of the project that require their approval. The following approvals are anticipated:

- *California Regional Water Quality Control Board, Los Angeles Region.* National Pollutant Discharge Elimination System (NPDES) general construction permit.
- *South Coast Air Quality Management District.* Operating permits for utility air pollutant sources, i.e. boilers and generators, and operating permits for ethylene oxide sterilizer and abaters.
- *Office of Statewide Health Planning and Development.* Building Permits for Hospital.

2.0 Project Description

2.1 Project Location

The City of Downey, which is in southeastern Los Angeles County, is an urbanized community located about 12 miles southeast of downtown Los Angeles. The city is bounded by the San Gabriel River on the east, Telegraph Road on the north, the Rio Hondo River on the west, and Gardendale Street and Foster Road on the south. Cities bordering Downey include: Pico Rivera on the north, Santa Fe Springs on the northeast, Norwalk on the east, Bellflower and Paramount on the south, South Gate on the west and the City of Commerce on the northwest. Figure 2-1 shows the location of Downey within Los Angeles County.

The street address for the project site is 12214 Lakewood Boulevard, and County Assessors Parcel Number for the project site is 6256-004-900. The approximately triangular project site is located in the southeastern portion of the City of Downey, and as illustrated by Figure 2-1, lies approximately 1 ¼ miles west of the San Gabriel River Freeway (Interstate 605), about 2 ½ miles south of the Santa Ana Freeway (I-5), and about ¼ mile north of the Glenn Anderson Freeway and Transit Way (I-105). The San Gabriel River is located within ¾ mile of the site to the east. Lakewood Boulevard and Clark Avenue border the project site on the west, Imperial Highway provides the southern border, Stewart & Gray Road is to the north, and Bellflower Boulevard provides the eastern boundary.

2.2 Site Characteristics

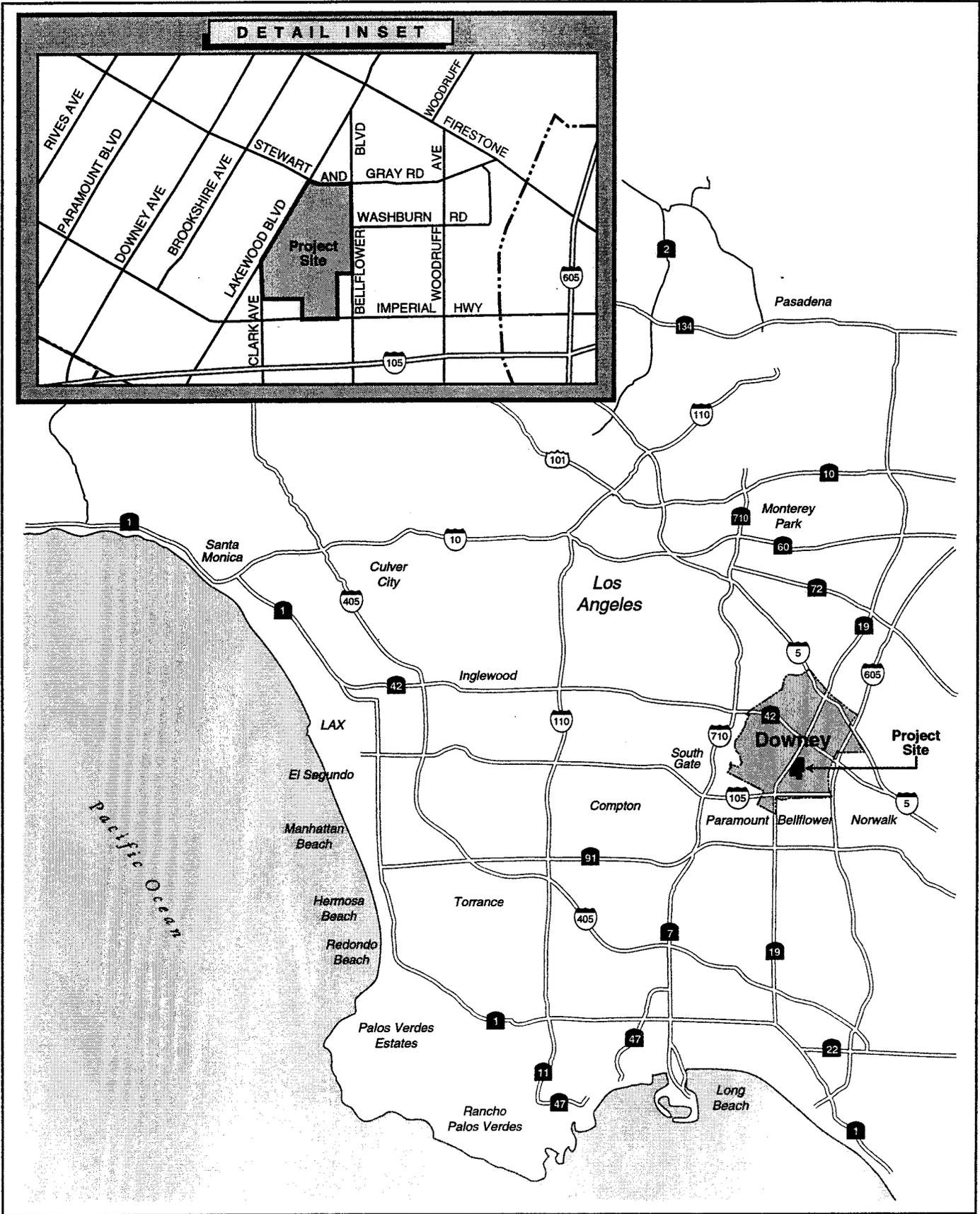
Table 2-1 summarizes the characteristics of the project site. The text following the table describes these characteristics in more detail.

2.2.1 Topography

The project site is relatively flat. Elevations range from 93 feet above mean sea level (MSL) to 104 feet above MSL, which creates a gentle southerly slope of about 17 feet per mile (SCS 1998, 2). The entire site has previously been graded.

2.2.2 Site Cover

The majority of the project site is developed with urban uses, and is impermeable. Small areas in the eastern portion of the site (Area II) are permeable.



DETAIL INSET

0 1 2 4 Scale In Miles



10552-00

EIP

ASSOCIATES

**FIGURE 2-1
Regional Location**

City of Downey

SOURCE: EIP Associates

**TABLE 2-1
SUMMARY OF PROJECT SITE CHARACTERISTICS**

Address	12214 Lakewood Boulevard
Assessors Parcel Number(s):	6256-004-900
Number of Lots:	6 (per NASA)
Gross Acreage:	160 acres
General Plan Designation:	Mixed-Use
Existing Land Use(s):	Primarily vacant industrial buildings, some motion picture production
Proposed Land Use(s):	Retail, office, technology and business park, hospital, and medical office
Existing Zoning:	General Manufacturing (M2) with Parking Buffer (P-B) at site edges
Proposed Zoning:	Specific Plan
Utilities/Providers:	Fire: Downey Fire Department Police: Downey Police Department Electricity: Southern California Edison Natural Gas: Southern California Gas Company Water: City of Downey Sewer: Los Angeles County Sanitation Districts, City of Downey Reclaimed Water: Central Basin Municipal Water District Storm Drain: City of Downey Telephone: Verizon Telephone Cable Television: MediaOne Cable Television

Source: EIP Associates 2001



2.2.3 Surrounding and On-Site Land Use

Existing, on-site land uses comprise:

- Vacant NASA buildings (though Building 1 and some others are used occasionally for motion picture production);
- Vacant, undeveloped lots; and
- Vacant parking uses.

The site contains some 124 buildings, structures, and other built features (Earth Tech 1999, 4-1). Building 1 is the most prominent of these, and encompasses about 913,023 sq. ft. Due to its size and configuration, Building 1 is sometimes used for motion picture production, as are Buildings 9, 11, 14, 39 288, and 6/290.

Nineteen of the structures on-site—structures 1, 6, 10, 11, 25, 36, 39, 41, 42, 108, 120, 123, 125, 126, 127, 128/674/676 (1 structure), 130, 288, and 290—were determined by Earthtech (1999, see Figure 4-1B) to be potentially eligible to the National Register of Historic Places (NRHP), and the California State Office of Historic Preservation (SHPO) concurred. Buildings 1 and 6/290 were determined to be the principal historical resources of the site, and are potentially eligible on an individual basis,

while the remaining structures have potential collective significance. However, as described in the Revised Initial Study for the project (Appendix B of the EIR), consultation with SHPO culminated in a Memorandum of Agreement (MOA) that identifies necessary measures to resolve the potential adverse effects of project implementation on historic structures on-site.

Surrounding land uses include:

- Low-, Low/Medium-, and Medium-Density Residential uses to the north and northeast, across Stewart & Gray Road and Bellflower Boulevard;
- Neighborhood Commercial, Medium-Density Residential, and School uses to the west, across Lakewood Boulevard;
- General Commercial uses to the west, between Clark Avenue and Lakewood Boulevard;
- Medium-Density Residential uses west of Clark Avenue, south of Imperial Highway;
- Medium-Density Residential, Commercial Manufacturing, Independence Park, a Public Works yard, and Neighborhood Commercial uses to the east, across Bellflower Boulevard;
- Kaiser Permanente medical offices, adjacent to the project site's southeast boundary; and
- Los Angeles County office and education complexes, a Kaiser Permanente maintenance complex, and General Commercial uses to the south of the project site, across Imperial Highway.

2.2.4 Land Use Diagram and Zoning Designations

The entire project site is designated in the General Plan Land Use Diagram as Mixed-use, which allows commercial and manufacturing uses, or a combination of them. Hospitals and medical facilities are commercial uses, or are otherwise consistent with "combination of commercial/manufacturing uses." The zoning designation for the project site is General Manufacturing (M2), with Parking Buffer (P-B) on the perimeter of the site along Clark Avenue, Imperial Highway, and Stewart & Gray Road.

2.3 Project Objectives

The objectives of the City of Downey (the Lead Agency) and the project applicants for the project are as follows:

- Develop a land use plan for a currently underutilized site, which at build-out will result in the development of a distinctive mixed-use project (i.e., retail center, television/film production facilities, business park, museum/learning center, and hospital and medical office facility) that is consistent with the goals and policies of the City's General Plan.

- Create employment opportunities that will replace the jobs that were lost with the closing of the NASA facility, with respect to both quantity and quality.
- Develop a specific plan that will ensure project compatibility with neighboring land uses through the use of land use controls and design guidelines, while providing for both employment and shopping opportunities.
- Increase and diversify the number of retail merchandise opportunities in the community for the purpose of capturing those Downey residents who are shopping elsewhere so as to reduce the City's leakage of sales tax revenue.
- Provide for the development of additional retail businesses so as to enlarge the City's retail trade area and in turn strengthen its economic base.
- Enhance the visual character of the project site, which in turn will help to strengthen the image of the community.
- Replace the project site's existing zoning districts with a mixed-use specific plan that recognizes the site's unique features and location advantages, provides for its orderly development, and attracts high-quality retailers, businesses, and technology companies.
- Provide public improvements to serve the project site and thereby ensure an improved environmental quality for onsite businesses and employees.
- Develop a built environment that reflects a high level of concern for architectural and urban design principles through a Specific Plan.
- Attract businesses that generate positive net revenues for the community to help support local services.
- Highlight the use of some of the site's existing buildings with the advantages they offer as locations for film and television production.
- Diversify and strengthen the City's economic base by attracting base-type businesses.
- Preserve that portion of Building 1 that has been designated historical.
- Prepare a specific plan that recognizes the history that occurred at the project site involving the development of NASA's Apollo and Space Shuttle programs.
- Develop a specific plan whose land use components are internally linked for pedestrian and vehicular travel.
- Replace the functionally outmoded Kaiser Bellflower hospital with new structures that meet current life safety, fire and seismic requirements for health care facilities.
- Continue to provide health care in Kaiser owned facilities to Kaiser members served by the Bellflower facility during the replacement of the Kaiser Bellflower hospital.

- Provide a consolidated and centralized medical center location for Kaiser members in the Downey/Bellflower community to receive medical care.
- Offer state-of-the-art medical care in facilities to be constructed and designed to optimize the quality of patient care in the new millennium.

2.4 Project History

The project site has been in substantially continuous use since construction of the initial facilities in 1929. The use of the site evolved over its lifetime, and included aircraft manufacturing and assembly; testing and operation of the first low-level nuclear reactor in California; invention, testing and patenting of a chemical milling process; research, production and assembly of early American rockets and missiles; design, production, assembly, and testing of equipment associated with space and moon landing programs; and design, development, manufacturing, assembly, and support for the Space Shuttle program. Ownership of the facilities on-site has shifted from Vultee to Consolidated to North American to the United States Air Force (USAF) and to NASA. North American Aviation operated the plant for the USAF, while North American Rockwell and, later, Boeing operated the plant during NASA's ownership. In 1998, as a result of restructuring within Boeing North American, the Downey NASA Industrial Plant was determined to be "excess to the company's needs," and was, therefore, also considered to be excess to the government's needs and available for disposal by Spring 2001 (NASA 2000). The City of Downey has arranged to purchase Parcels 1 and 2 of the NASA plant from the California State Lands Commission, who is acquiring the excess property from the General Services Administration (GSA). Parcels 3, 4, 5 and 6 of the plant have already been purchased by the City, and conveyance of Parcels 1 and 2 to the City is anticipated to occur in Spring/Summer 2002. Through a competitive bidding process, the City also entered into a negotiation process with the Ezralow Company and with Kaiser to develop the site. The development entity has since changed from the Ezralow Company to "Downey Landing, LLC" and will be referred to by the new name throughout this document. Pursuant to this negotiation process, Downey Landing, LLC, Kaiser, and the City have retained a consultant to prepare a Specific Plan to guide development of the site into a mixed-use commercial, technology and business park complex, as well as a hospital and medical office complex. As further described below, the Specific Plan is the project that this EIR analyzes, pursuant to CEQA.

2.5 Description of the Proposed Project

2.5.1 Project Characteristics

The proposed project consists of a Specific Plan, rezoning, development agreements, and other discretionary approvals for a mixed-use development proposal that is planned for the 160-acre former NASA site in Downey at the address listed above. Land uses planned for development include commercial retail, technology and business park, motion picture production, hospital, and medical office uses. Together, the project's buildings will total a maximum of approximately 3.7

million sq. ft. of floor area (of which 3.1 million sq. ft. would generate traffic) in four distinct planning areas. As discussed above, eight buildings in Downey Landing, LLC Area II (see below) could potentially be reused, which would represent a higher amount of building area but with a less-intensive use, and would substantially reduce the amount of new development. The anticipated maximum square footage values of new improvements proposed for each area are summarized in Table 2-2 below, and are described further in the text following the table. The maximum values were determined by a preliminary traffic analysis to potentially result in the greatest traffic (and therefore air quality and noise) impacts, and were evaluated in the EIR to provide a conservative analysis. Figure 2-2A shows the development areas under Option 1, and Figure 2-2B shows the development areas under Option 2.

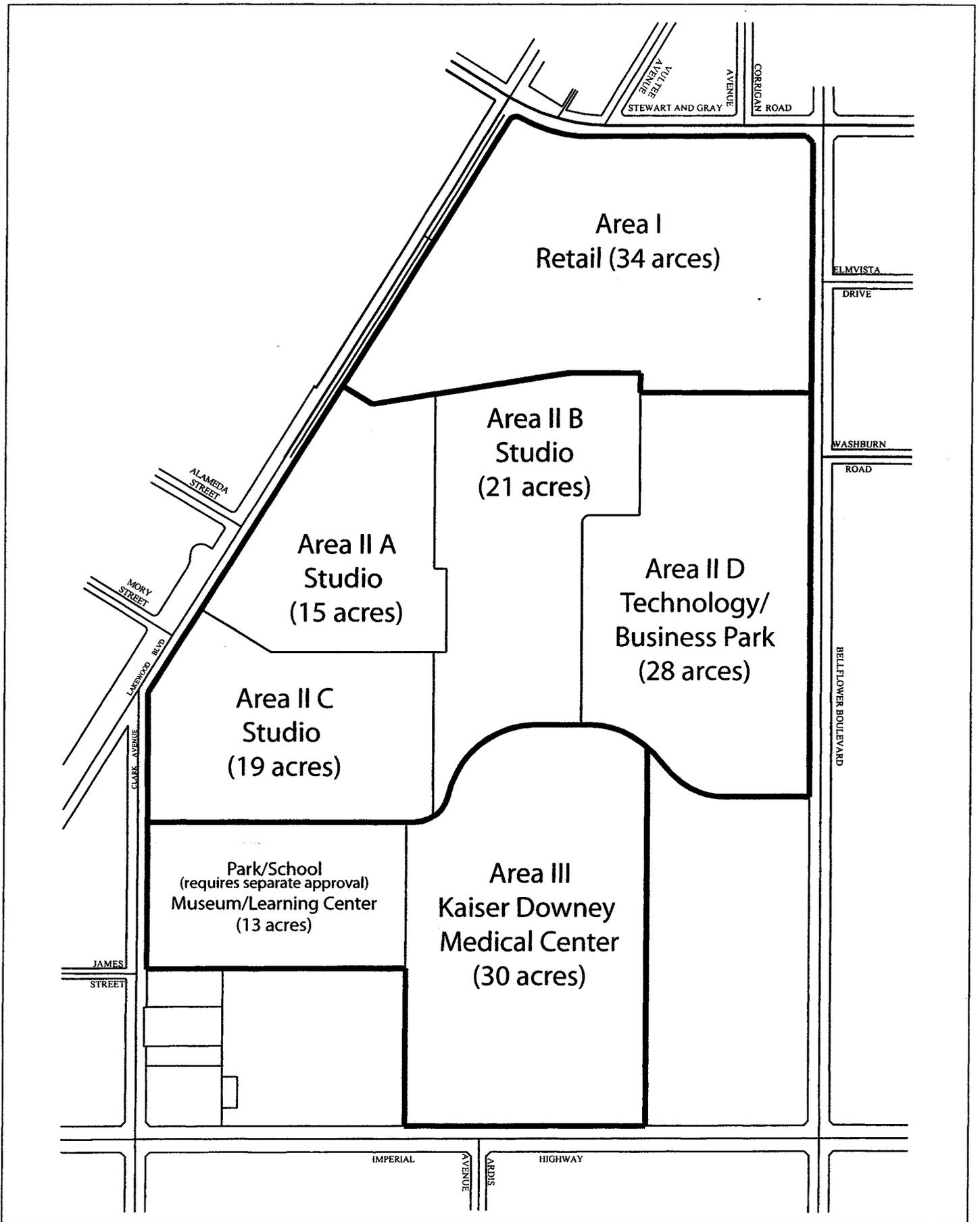
**TABLE 2-2
PROPOSED USES AND MAXIMUM BUILDABLE AREA
(BY PLANNING AREA)**

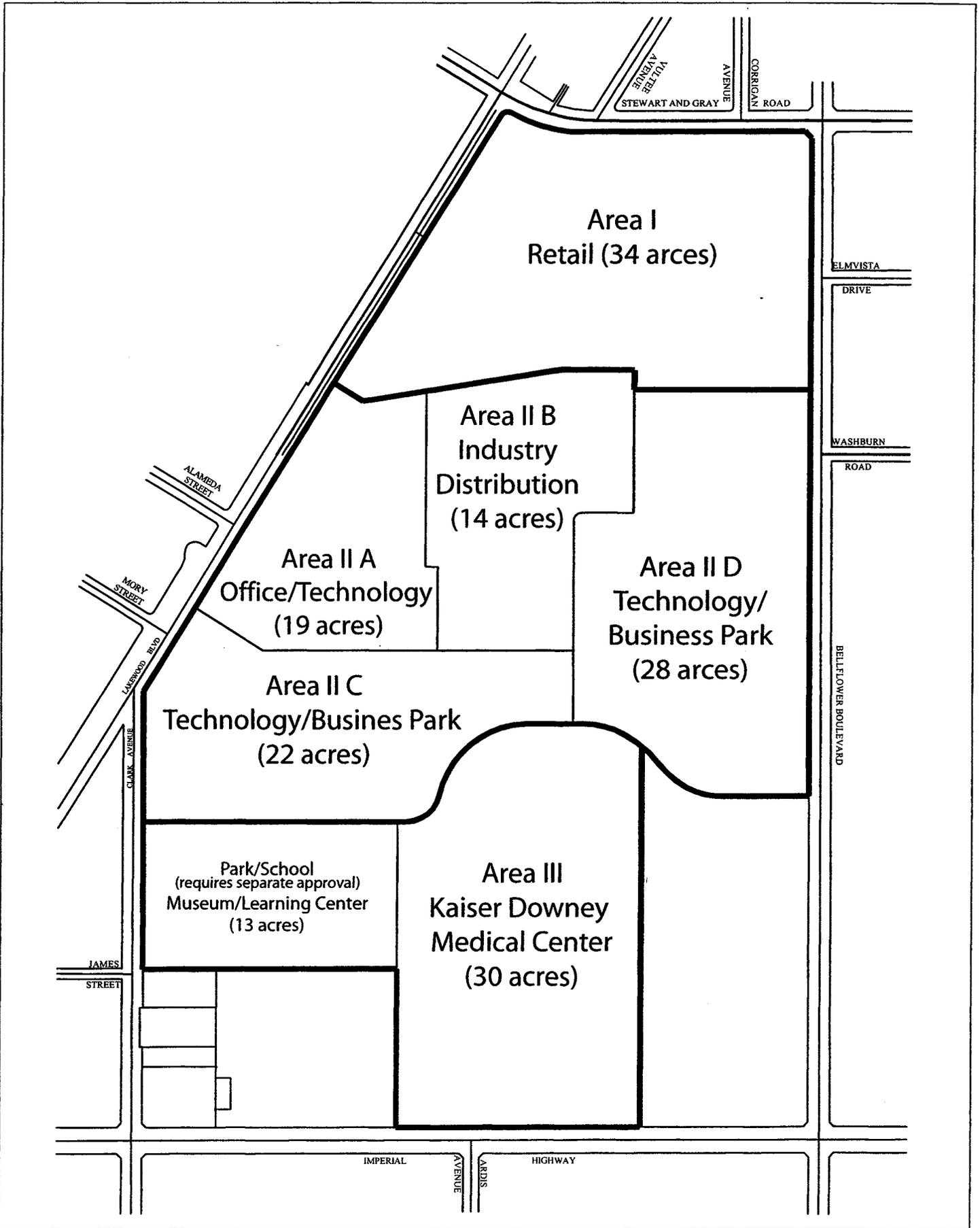
Features	Planning Area I	Planning Area IIA	Planning Area IIB	Planning Area IIC	Planning Area IID	Planning Area III	TOTAL
Total Acreage	34.00 acres	up to 19 acres	up to 21 acres	up to 21 acres	28 acres	43 acres (including 13 acre Park/School)	160 acres
Buildable Area*	410,000 sq. ft.	up to 444,500 sq. ft.	up to 421,549 sq. ft.	up to 384,800 sq. ft.	516,200 sq. ft.	1,000,000 sq. ft. (building) 681,550 sq. ft. (parking structure) 50,000 sq. ft. Learning Center (potential)	3,100,000 sq. ft.
General Proposed Uses	Commercial /Retail	Technology and Business Park, Studio	Industrial/ Studio	Technology and Business Park	Technology and Business Park	Hospital, Medical Office, Central Plant, Parking Structure, potential Learning Center	
Floor to Area Ratio (FAR)	.27	.49	.43	.50	.44	.45	.43
Parking Spaces	2,114	up to 920	up to 850	up to 1113	1,600	up to 2,431	up to 8,630

Source: City of Downey 2001

* Buildable Area does not include on-site roadways and other infrastructure, including parking structures.

* The Masterplan has two options with different configurations of planning areas. Throughout the EIR, "Total Acreage" and "Buildable Area" represent the higher of the two configurations. Therefore, EIR site totals add up to greater than actual site totals.





Not to Scale

SOURCE: Bastien and Associates, INC



FIGURE 2-2B
Proposed Development Areas, Option 2

City of Downey

Area I

Downey Landing, LLC Area I encompasses slightly more than 34 acres and occupies the northern portion of the project site. A planned retail shopping center would occupy this area, and would be oriented toward Lakewood Boulevard and Stewart & Gray Road. The other street bordering Area I is Bellflower Boulevard. The center will feature both inline stores and freestanding buildings. Together, the center's buildings will provide a maximum of 410,000 square feet (sq. ft.), plus parking.

Area II

Downey Landing, LLC Area IIA would total up to 19 acres and occupy the western central portion of the site, fronting on Lakewood Boulevard. The development proposal involves either reusing current buildings for motion picture studio and production space or other adaptive reuse, or demolishing the majority of the building in favor of approximately 444,500 sq. ft. of technology and business park uses. Parking would be provided to serve these anticipated uses. The latter option would generate the highest traffic counts and is therefore the option examined in the EIR, to provide a conservative environmental analysis.

Downey Landing, LLC Area IIB would total up to 21 acres and would occupy the central portion of the site. The development proposal involves either reusing current buildings for motion picture studio and production space or other adaptive reuse, or demolishing the majority of the building in favor of approximately 243,000 sq. ft. of industrial uses. Parking would be provided to serve these anticipated uses. The latter option would generate the highest traffic counts and is therefore the option examined in the EIR, to provide a conservative environmental analysis.

Downey Landing, LLC Area IIC would total up to 22 acres. Area IIC fronts the intersection of Clark Avenue and Lakewood Boulevard, directly south of Area IIA. It supports an existing building (Building 1) that contains 913,023 sq. ft., which both Rockwell and the Boeing Company used for aerospace manufacturing and testing purposes. The development proposal involves either reusing current buildings for motion picture studio and production space or other adaptive reuse, or demolishing the majority of the building in favor of approximately 384,800 sq. ft. of technology and business park uses. Parking would be provided to serve these anticipated uses. The latter option would generate the highest traffic counts and is therefore the option examined in the EIR, to provide a conservative environmental analysis.

Downey Landing, LLC Area IID would be developed as an office park. It would encompass 28 acres and occupy the eastern central portion of the project site; plans show Area IID would front on Bellflower Boulevard. Planned improvements consist of 2-story office buildings for a combined maximum of 516,200 sq. ft. Open/green space uses will be interspersed throughout the project site,

as well. Construction of each phase is anticipated to span 10 months. Area II is currently under temporary use by several motion picture production companies, and if Buildings 1, 9, 11, 14, 39, 288 and 6/290 are kept externally intact and reused, their reoccupancy would occur concurrently with construction of Area I. In the case of demolition of Buildings 1, 9, 11, 14, 39, 288, and 6/290, Areas I would be developed first, Area III second, and Area II last. Construction staging is anticipated to occur on-site.

Area III

Kaiser portion of Area III- According to the development proposal submitted by Kaiser, this portion of the project would develop 1.0 msf of hospital, medical office buildings, and associate uses and .69 msf of structured parking on 30 acres of land. The proposed Kaiser project is a replacement for Kaiser's existing 8-story hospital tower in the City of Bellflower. Proposed improvements include a new 6-story 680,000 square foot hospital building with a planned capacity of 351 beds; new, four-story, 292,700 square feet of medical office buildings, a 27,300-square-foot central plant, and a six-level, 681,550-square-foot parking structure. It should be noted that the hospital building may be up to eight stories, provided that total square footage does not exceed 680,000. Development of a seven- or eight- story hospital building would not induce environmental impacts beyond those of a six-story building. Construction would be phased over a period of about ten years. The specific components of each phase are tentative; however, development would not exceed 1.0 msf for the hospital and medical office building uses and 681,550 sq. ft. parking structure, and phasing variations would not affect the analysis presented in this EIR.

Park/School/Learning Center portion of Area III- The westernmost 13-acre portion of Area III, which abuts Clark Avenue, is being reserved for the Downey Unified School District for use as a school/park/learning center; however, neither the Specific Plan nor this EIR will entitle or provide environmental clearance for development of any school, and the District would be required to initiate a separate environmental process if it chooses to develop the site. A 50,000 sq. ft. learning center may be located on this 13-acre site.

2.5.2 Project Schedule and Construction Phasing

Downey Landing, LLC

Construction of the Downey Landing, LLC portion of the project would proceed in approximate numeric order by area. Demolition of structures in Planning Area I would begin in Spring/Summer 2002, after Certification of the EIR and adoption of the Specific Plan. Construction of Area I is anticipated to span ten months, and the commercial uses therein are anticipated to open to the public in 2003.

Area II is currently under temporary use by several motion picture production companies, and if Building 1 is kept externally intact and reused (Option 1), improvements could occur concurrently

with construction of Area I. If the majority of Building 1 is demolished (Option 2), then construction of Area II would likely be completed in increments, commencing mid-2004. Under Option 2, completion of Area II is anticipated to be completed and ready for occupancy within four to six years of the commencement of construction. Staging for all phases of construction is anticipated to occur on-site.

Kaiser

The Kaiser portion of the project would also be constructed in several phases. The first phase, which Kaiser plans to complete around mid-2004, would consist of one of the medical office buildings and surface parking spaces to support it. Commencing on or before December 2006, Kaiser would construct the hospital, the second medical office building, the central plant, and the parking structure, which is anticipated to be completed and ready for occupancy within four years of the commencement of construction. Kaiser also may develop, at its option, additional hospital capacity and further office uses. Note that the current phasing scheme is tentative; however, the combination and progression of uses developed would not exceed 1.0 million sq. ft. (excluding the parking structure), and would not materially affect the analysis of the Kaiser project in this EIR.

2.5.3 Requested Approvals

Implementation of the proposed project would require the following discretionary approvals by the agencies listed below. This EIR would be used by these agencies as a basis for such approvals.

City of Downey

- Adoption of Specific Plan No. SP-01-1
- Approval of the Specific Plan design guidelines by the Design Review Board.

Regional Water Quality Control Board

- National Pollutant Discharge Elimination System (NPDES) general construction permit.

California Division of Mines and Geology

- Construction Permit (Kaiser only).

2.6 Cumulative Scenario

As stated in Section 15130(b) of the CEQA Guidelines, the following elements are necessary for an adequate discussion of significant cumulative impacts:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or

- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

As described above, it is anticipated that the proposed project would be completed by mid-2006. For the purposes of further refining the cumulative impact analysis in this EIR, the "cumulative context" for the proposed project includes the existing, previously approved, and reasonably foreseeable future projects within the geographical area that would contribute to the particular cumulative impact. These projects are listed in Table 2-3 below.

TABLE 2-3
RELATED PROJECTS

Project Name	City	Sq.Ft.	Type of Uses	Address	Nearest Intersection
Rancho Los Amigos Business Park	Downey	1,483,932	Light Industrial		Imperial / Erickson
Tract No. 53325	Downey		21 lot Single Family Subdivision	11706-11732 Rives Ave.	Rives/St. G. Road
Tract No. 53220	Downey		17 lot Single Family Subdivision	7043 - 7048 Dinwiddie	Dinwiddie/ Firestone
	Downey	83,000	Self Storage	9641 Imperial Hwy.	
Proposed Plans	Santa Fe Springs	6,848	Industrial		S.E. Corner of Telegraph and Bloomfield
Proposed Plans	Santa Fe Springs	6,909	Industrial		S.E. Corner of Telegraph and Bloomfield
Proposed Plans	Santa Fe Springs	7,118	Industrial		S.E. Corner of Telegraph and Bloomfield
Proposed Plans	Santa Fe Springs	147,233	Industrial		S.E. Corner of Telegraph and Bloomfield
Proposed Plans	Santa Fe Springs	218,671	Industrial		Parcel E. of Bloomfield, Between Park and Telegraph
Proposed Plans	Santa Fe Springs	36,299	Industrial		N. of Telegraph, S. of Romandel, E. of Railroad Tracks, W. of Freeman
Proposed Plans	Santa Fe Springs	32,696	Industrial		N. of Telegraph, S. of Romandel, E. of Railroad Tracks, W. of Freeman
Proposed Plans	Santa Fe Springs	71,639	Industrial		N. of Telegraph, S. of Romandel, E. of Railroad Tracks, W. of Freeman
Proposed Plans	Santa Fe Springs	4,796	Industrial		N. of Telegraph, S. of Romandel, E. of Railroad Tracks, W. of Freeman
Proposed Plans	Santa Fe Springs	20,299	Industrial		N. of Telegraph, S. of Romandel, E. of Railroad

**TABLE 2-3
RELATED PROJECTS**

Project Name	City	Sq.Ft.	Type of Uses	Address	Nearest Inter-section
Proposed Plans	Santa Fe Springs	22,499	Industrial		Tracks, W. of Freeman N. of Telegraph, S. of Romandel, E. of Railroad Tracks, W. of Freeman
Proposed Plans	Santa Fe Springs	22,747	Industrial		N. of Telegraph, S. of Romandel, E. of Railroad Tracks, W. of Freeman
Proposed Future Possibility	Santa Fe Springs	1,587,237	Various		N. of Telegraph, Between Santa Fe Springs Road and Greenleaf, S. of Barton
Rockview Farms	South Gate	48,000	Agricultural	9845 Miller Way	Southern and Garfield Avenue
Blue Diamond Materials/ Sulley Miller Gonzales Nissan Target Center	South Gate		Industrial	5625 Southern Avenue	Southern and Garfield Avenue
	South Gate	32,300	Commercial	5849 Firestone Blvd	Firestone and Garfield Avenue
	South Gate	15,200	Commercial	5704 Firestone Blvd	Firestone and Garfield Avenue
El Paseo Center	South Gate	300,000	Commercial/ Retail	8600 Garfield Avenue	Firestone and Garfield Avenue
Marquez and Marquez Foods	South Gate	42,511	Commercial	11803 Paramount Blvd	Paramount and Gardendale
Los Angeles County Office of Education Ameron Site Development Project	South Gate		Institutional	13050 Paramount Blvd	Paramount and Gardendale
	South Gate	300,000 – 400,000	Office Space	4635 Firestone Blvd	Atlantic Ave. and Firestone Blvd.
Smiser Trust Distribution Center	South Gate	54,000	Industrial	8610 Atlantic Avenue	Atlantic Avenue and Firestone Blvd.
Los Angeles USD Maintenance Facility	South Gate		Institutional	5115 Southern Ave	Atlantic Ave. and Southern Ave.
L.A.U.S.D Area District Offices	South Gate	45,000	Institutional	2560 Tweedy Blvd	Tweedy Blvd and Alameda St.
L.A.U.S.D District Offices	South Gate		Institutional		Tweedy Blvd and Alameda St.
L.A.U.S.D. (3 new campuses)	South Gate		Institutional	9800 Pinehurst 3221 Tweedy 9621 Long	

**TABLE 2-3
RELATED PROJECTS**

Project Name	City	Sq.Ft.	Type of Uses	Address	Nearest Inter- section
East Los Angeles College	South Gate	100,000	Institutional	Beach Blvd 2340 Firestone Blvd	Firestone and Alameda
L.A.U.S.D. Adult School	South Gate	20,000	Institutional	2561 Firestone Blvd	Santa Fe and Firestone Blvd
Del Taco	South Gate	2,500	Restaurant	2920 Firestone Blvd	Long Beach Blvd. and Firestone
South Gate Senior Village	South Gate	20,000	Residential		Tweedy Blvd and California Ave.

3.0 Introduction to the Environmental Analysis

This chapter describes the existing environmental resources at the project site and adjacent locations, analyzes potential impacts on those resources due to the proposed project, and identifies mitigation measures that could avoid or reduce the magnitude of any significant impacts. The evaluation of effects is presented on a resource-by-resource basis in Section 3.1 through Section 3.9. Each technical section is divided into four subsections: Introduction; Existing Conditions; Regulatory Framework; Thresholds of Significance; Impacts; Cumulative Impacts, and Mitigation Measures. Each of these subsections is described below.

Introduction

The introduction provides an overview of the analysis within each section.

Existing Conditions

The existing conditions in each technical section includes information about the physical environmental conditions in the vicinity of the project (as they exist at the time the notice of preparation is published) that are relevant to that particular environmental issue area. This establishes a baseline against which to compare the effects of the proposed project.

Regulatory Framework

A summary of relevant local and regional plans and policies is provided.

Thresholds of Significance

This section defines the type, amount, or extent of impact that is considered a significant adverse change in the environment. Some thresholds are quantitative (e.g., air quality, traffic, noise), while others are qualitative (e.g., visual quality). The thresholds are intended to assist the reader in understanding why the EIR reaches a conclusion that an impact is significant or less than significant.

Impacts

This section describes the potential environmental impact(s) of the project (listed separately) and, based upon the Thresholds of Significance, concludes whether the project impact would be significant or less than significant. When a conclusion of a significant impact is reached, this subsection may include feasible mitigation measures that could reduce the impact of the project to a less than significant level. If mitigation measures are included, the section concludes with a

statement regarding whether the impact, following implementation of the mitigation measure(s), would remain significant, or would be reduced to a less than significant level.

Cumulative Impacts

This section describes cumulative impacts to which the project contributes. The summary of cumulative impacts is based upon related projects and projected regional growth in the surrounding area (the Gateway Cities).

Mitigation Measures

This section describes feasible mitigation measures that would substantially reduce an identified impact, as described above under Impacts.

3.1 Aesthetics/Lighting

3.1.1 Introduction

The Initial Study prepared for this project (which is included as Appendix A of this document) determined that effects on scenic vistas, scenic resources, and visual character resulting from implementation of the proposed project would be less than significant. Heights of the proposed project's building are acceptable per the Downey Landing Specific Plan height requirements. Therefore, this section considers the potential effects of project-related increases in light levels, particularly nighttime light levels, and glare of the structures proposed under the project and the surrounding residential uses to the north, across Stewart & Gray Road, other neighborhood residential on the west side of Lakewood Boulevard and west side of Clark, and to the east, across Bellflower Boulevard. The lighting impacts will be assessed separately for the Downey Landing, LLC and Kaiser Foundation Hospital proposals. The context for both assessments is the current interim use of the site since discontinuation of Boeing operations in 1993; since that time, portions of the site have been utilized as motion picture sound and production facilities. This temporary industrial usage has required little or no nighttime lighting on the northern portion of the site, adjacent to the residential neighborhood north of Stewart & Gray Road. This evaluation is informed by site visits by EIP Associates personnel in February and March 2001.

3.1.2 Existing Conditions

The City Of Downey

The City of Downey can be characterized as a developed urban environment located within a subregion known as the Gateway Cities. The existing, exterior nighttime lighting environment in the City is provided primarily by streetlights, exterior structure lighting, parking lot lighting, illuminated signage, and vehicle headlights.

The Project Site

Few sources of nighttime lighting internal to the project site currently exist. While portions of Buildings 1, 288, and 6/290 are currently used for motion picture production, most of this activity occurs during daylight hours, with the exception of an active motion picture set in a portion of the existing parking lot in proposed Area II (the central portion of the site). Additionally, most production activities occur indoors and produce little exterior lighting that could spill onto surrounding properties.

No nighttime activity now occurs in the northern portion of the project site (proposed Area I). Additionally, the northern portion of the site is unlit. The most prominent source of nighttime light

in the vicinity of the project is street lighting on Lakewood and Bellflower Boulevards, Imperial Highway, and Stewart & Gray Road and Clark Avenue.

3.1.3 Regulatory Framework

City of Downey General Plan Design Chapter

The purpose of the General Plan Design Chapter is to “create a strong visual image by improving the quality of design in Downey.” The Chapter provides standards, policies, and programs to retain and strengthen the visual image of the community by promoting urban design. The following policies and programs in the Design Chapter are applicable to the proposed project.

Policy 8.1.1

The City shall require new developments and major renovations to have design “links.”

Program 8.1.1.1

Require new developments and major renovations, including parcels smaller than 10,000 sq. ft., to use “design links” such as hardscape, lighting, landscaping, color, signing, and common building materials to visually link properties.

Consistency

The proposed Specific Plan will include color and plant palettes and detailed design guidelines for structures on the project site. Building exterior lighting standards are also proposed. Additionally, the Specific Plan includes a landscaped pedestrian parkway to link the areas within the site. The proposed project would, therefore, be consistent with Program 8.1.1.1 of the Design Chapter.

City of Downey Municipal Code

Section 9144.06(g)

Subsection (g) specifies that no operation, activity, or lighting fixture shall create illumination which exceeds five-tenths (.5) foot-candles at any point on the lot lines of the use.

Section 9152.18

Subsection (b) specifies that outdoor lighting shall be arranged so as not to direct light on any street or abutting property, and that exposed bulbs are not permitted. Subsection (d) requires approval of lighting intensities by the City Traffic Engineer and City Planner. Subsection (f) forbids, in commercial and manufacturing zones, lighting structures over five feet in height within 20 feet of a public right-of-way (except for car dealerships).

Compliance

The project will prevent to the fullest extent possible the direction of light off-site and light spillage onto nearby residential properties. The project will further utilize non-exposed bulbs and obtain approval of all lighting intensities as required in the Municipal Code. The Downey Landing Specific Plan incorporates the requirements of the Downey Municipal Code as to outdoor lighting. Therefore, the project will therefore comply with the provisions of Sections 9152.18 and 9144.06 of the Downey Municipal Code and their specified subsections.

3.1.4 Thresholds Of Significance

The proposed project will have a significant visual impact if it would introduce a new source of substantial light or glare that could affect sensitive uses in the project vicinity.

3.1.5 Impacts

Less Than Significant Impacts

The Kaiser portion of the project would introduce three primary sources of light: building exterior lighting, parking lot lighting, and vehicle headlights. Ingress and egress from the Kaiser facility would be on Imperial Highway and off of new roads; the entrance would not be situated across from residences and no vehicle headlights would be directed onto residential property or other sensitive uses. Uses across Imperial Highway from the proposed Kaiser facility are commercial and industrial only and include no residential uses. Multifamily residential uses are sited only at the north end of Bellflower Boulevard on the east side, and are not in the immediate vicinity of the proposed Kaiser facility. The lighting provisions of Section 9152 of the Downey Municipal Code would prevent the direction of light off-site, particularly with respect to lighting fixtures that would be used in the parking areas of the Kaiser facility, and would reduce glare impacts resulting from light spillage onto nearby uses. Therefore, the impacts of vehicle headlights on residences or other sensitive uses and the impacts of building exterior and parking lot lighting as a result of the proposed Kaiser project are **less than significant**.

Potentially Significant Impacts

Implementation of the proposed project would not result in any potentially significant aesthetics/lighting impacts.

Significant, Unavoidable Impacts

Impact 3.1-1: **The proposed Downey Landing, LLC project would introduce a substantial source of nighttime light and glare that could affect sensitive uses in the project vicinity.**

The proposed project would introduce three primary sources of light: building exterior lighting, parking lot lighting, and vehicle headlights. Development proposed in Areas IIA, IIB, IIC, and IID of the project site consists primarily of business park uses, as well as parking for these uses. The project would include lighting for building exteriors and parking lots. However, nighttime lighting in these areas would occur at relatively low levels, and walls and landscaping along the perimeter of the site would provide a buffer between on- and off-site uses, preventing significant amounts of spillage of light onto adjacent properties. Additionally, the walls and landscaping would help shield adjacent uses from direct illumination by the headlights of circulating vehicles on-site, with the exception of gaps at the entry points along Lakewood Boulevard and Bellflower Boulevard. Adjacent uses near the currently proposed entry points along Clark Avenue and consist of commercial and industrial uses, which are not considered sensitive to increases in nighttime light levels, and residential uses on the west side of Clark. However, entry points along Lakewood Boulevard and Bellflower Boulevard could direct vehicle headlights toward multiple-family residential uses, which are considered sensitive to increases in nighttime light levels, and residential uses on the west side of Clark. Although the uses proposed in Areas IIA, IIB, IIC, and IID are anticipated to see the greatest use during normal business hours, and as a result, are not anticipated to generate substantial nighttime activity and vehicular traffic, headlights could still illuminate multiple-family residences along the west side of Lakewood Boulevard and along the east side of Bellflower Boulevard. Additionally, project-related increases in traffic could potentially increase ambient light levels on Lakewood Boulevard during early nighttime hours.

In addition, the proposed project would substantially increase lighting levels in Area I, the northernmost portion of the project site. This is due primarily to the longer normal operating hours for restaurants and retail commercial uses than for the uses proposed in Areas IIA, IIB, IIC, IID, and III. These longer hours of operation would necessitate higher-intensity nighttime lighting for safety purposes. Additionally, full or nearly full overnight

illumination of the site is provided to deter vandalism and other illegal activity on the project site. Consequently, ambient light levels in Area I would be substantially increased under the proposed Downey Landing, LLC project.

Light and glare from vehicle headlights in Area I would also be more pronounced than in Areas II and III because of the later operating hours of the restaurant and commercial retail uses. Landscaping along the northern boundary is proposed to help diffuse this light, as well as an approximately three-foot earthen berm wall along the northern perimeter of Area I, a six-foot wall on the eastern perimeter, and landscaping along the western perimeter. These design features would reduce direct illumination by circulating traffic in the parking areas of the residential uses across Stewart & Gray Road, Bellflower Boulevard, and Lakewood Boulevard. However, direct illumination, by vehicle headlights, of single-family residential uses would still occur at entry and exit points along Stewart & Gray Road, and of multiple-family residential uses along Lakewood Boulevard. Further, the uses proposed for Area I generate the majority of the project-related traffic, and could indirectly increase ambient light levels on surrounding streets by increases in nighttime travel at store and restaurant closing times, which would in turn increase the exposure of residential uses to light impacts. These impacts would be considered significant.

The lighting provisions in Section 9152 of the Downey Municipal Court would prevent the direction of light off-site, particularly with respect to the lighting fixtures that would be used in the parking areas of Area I, and would reduce light spillage onto nearby residential uses. However, Downey Landing, LLC plans full-intensity overnight lighting of Area I for the security reasons described above. Therefore, no feasible measures could reduce the substantial increase in ambient lighting on the project site, and the resulting impact on sensitive uses along Stewart & Gray Road, Lakewood Boulevard, and Bellflower Boulevard.

Additionally, no mitigation measures are available that would significantly reduce the potential for the direction of vehicle headlights onto residential uses along Stewart & Gray Road, Lakewood Boulevard, and Bellflower Boulevard. Consequently, light impacts anticipated to result from the

proposed Downey Landing, LLC project would remain **significant and unavoidable**.

Impact 3.1-2: The proposed Kaiser project would introduce a substantial source of nighttime light into the project vicinity.

As with the proposed Downey Landing, LLC project, the proposed Kaiser project would introduce three primary sources of light: building exterior lighting, parking lot lighting, and vehicle headlights. Development proposed on the 30-acre project site consists of approximately 1.0 msf of hospital, medical office buildings, and a central plant, a 0.69 msf, six-level parking structure, and surface parking for these uses. The project would include lighting for building exteriors and parking lots. Due to the nature of the activities of a hospital facility, substantial nighttime lighting is expected to occur.

The first phases of the project would consist of new construction consisting of 97,500 ft. sq. of medical office buildings and surface parking lots. Due to the building heights, spillage of light onto adjacent commercial and industrial properties would be unavoidable. The multifamily residential uses on Bellflower Boulevard are sited at the north end of Bellflower, and are not in the immediate vicinity of the proposed Kaiser facility. Although the medical office uses in this area are anticipated to see the greatest use during normal business hours, and as a result are not anticipated to generate substantial nighttime activity and vehicular traffic, the hospital facility would be expected to see utilization at all hours, though diminished at night. Project-related increases in traffic could potentially increase ambient light levels on Bellflower Boulevard and Imperial Highway at all hours. Additionally, full or nearly full overnight illumination of the site would be provided due to the nature of the operation of the Kaiser Hospital. Consequently, ambient light levels would be substantially increased in the project site, but would not be anticipated to affect the multifamily residential uses at the north end of Bellflower Boulevard.

Light and glare from vehicle headlights in the area of the Kaiser Hospital and medical facilities would contribute to the overall light and glare produced along Bellflower Boulevard and Imperial Highway. However, a portion of this light and glare would be produced from the eastern portions of the Downey Landing, LLC project areas. Based on traffic studies and estimated

number of vehicle trips during PM hours, Kaiser's share of contribution to increased glare and ambient light from vehicle headlights would be approximately 42.9% from the Kaiser facility (1,722 peak PM vehicle trips for Kaiser versus up to 2,949 peak PM vehicle trips for Downey Landing, LLC).

The lighting provisions of Section 9152 of the Downey Municipal Code would prevent the direction of light off-site, particularly with respect to lighting fixtures that would be used in the parking areas of the Kaiser facility, and would reduce glare impacts resulting from light spillage onto nearby uses.

No mitigation measures are available that would significantly reduce the potential for increased glare and light from vehicle headlights onto commercial and industrial uses along Bellflower Boulevard and Imperial Highway, as well as the multifamily residential properties at the north end of Bellflower Boulevard. Consequently, light and glare impacts anticipated to result from the proposed project would remain **significant and unavoidable**.

3.1.6 Cumulative Impacts

Impact 3.1-3: The proposed project would contribute to the exposure of residential areas in the City to increased nighttime light and glare intensities.

For the purposes of this analysis, cumulative impacts are evaluated on a City-wide level, since increases in ambient light levels are generally a localized, neighborhood effect. The proposed project constitutes a substantial portion of the proposed development within the City, and would, therefore, represent a cumulatively considerable contribution to light and glare impacts to residential uses within the City. This is a significant impact. As described above in Impacts 3.1-1 and 3.1-2, provisions of the City of Downey Municipal Code would reduce these impacts, but not to a less-than-significant level. This cumulative impact would, therefore, be considered **significant and unavoidable**.

3.1.7 Mitigation

No feasible mitigation measures would reduce light and glare impacts to less-than-significant levels: These impacts would remain significant and unavoidable.

3.2.1 Introduction

This section addresses the air quality setting and impacts related to the construction and operation of the proposed project. Air pollutants are defined, and the framework of federal, state, regional, and local air quality requirements is described in Section 3.2.2 (Regulatory Framework). Section 3.2.3 (Existing Conditions) provides descriptions of the climate and meteorology, and an overview of the region's air quality characteristics and existing air quality in the project area, including the region's attainment/non-attainment status. This section also presents an analysis of the project's impact on ambient air quality on a regional and local basis. Air quality calculation data is provided in Appendix C of this document.

3.2.2 Regulatory Framework

For purposes of providing necessary background information defining regulated pollutants and ambient air quality standards, the regulatory framework discussion in this chapter of the EIR precedes the existing conditions discussion.

Ambient Air Quality Standards

National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) represent the upper limits on airborne concentrations that are recommended to protect all aspects of the public health and welfare, with a reasonable margin of safety. At the federal level, the federal Clean Air Act requires the U.S. Environmental Protection Agency (U.S. EPA) to establish NAAQS and designate areas that are either attaining or violating the standards. The NAAQS are divided into primary standards and secondary standards. Primary standards are designed to protect the public health, and secondary standards are intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage.

In California, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (ARB), which oversees air districts at the county or regional level. The ARB establishes CAAQS and designates the attainment status of each area in the state with the standards. These federal and state standards are shown in Table 3.2-1.

Criteria Pollutants

Pollutants for which a NAAQS has been established are known as criteria pollutants, and include ozone, carbon monoxide (CO), nitrogen dioxides (NO₂), sulfur dioxide (SO₂), particulate matter

(PM), and lead. Primary pollutants are emitted directly from a source (e.g., an automobile) into the atmosphere. Ozone and sulfate particulates are examples of secondary pollutants that are formed by atmospheric chemical and photochemical reactions. Reactive organic compounds (ROC), including volatile organic compounds (VOC), are also regulated as precursors to ozone formation.

TABLE 3.2-1
STATE AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standard ^{1,3}	Federal Standard ²	
			Primary ^{3,4}	Secondary ^{3,5}
Ozone	1-hour	0.09 ppm (180 µg/m ³)	0.12 ppm (235 µg/m ³)	Same as Primary
	8-hour	---	0.08 ppm (160 µg/m ³)	Same as Primary
Carbon Monoxide	1-hour	20.0 ppm (23 mg/m)	35 ppm (40 mg/m ³)	---
	8-hour	9.0 ppm (10 mg/m ³)	9.0 ppm (10 mg/m ³)	---
Nitrogen Dioxide	1-hour	0.25 ppm (470 µg/m ³)	---	---
	Annual Avg	---	0.053 ppm (100 µg/m ³)	0.053 ppm (100 µg/m ³)
PM ₁₀	24-hour	50 µg/m ³	150 µg/m ³	Same as Primary
	Ann Geo Mn	30 µg/m ³	---	---
PM _{2.5}	Ann Arith Mn	---	50 µg/m ³	Same as Primary
	24-hour	---	65 µg/m ³	Same as Primary
Sulfur Dioxide	Ann Arith Mn	---	15 µg/m ³	Same as Primary
	1-hour	0.25 ppm (655 µg/m ³)	---	---
Sulfates	3-hour	---	---	0.5 ppm (1,300 µg/m ³)
	24-hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)	---
Lead	Ann Arith Mn	---	0.03 ppm (80 µg/m ³)	---
	24-hour	25 µg/m ³	---	---
Reducing Particles	30-day Avg	1.5 µg/m ³	---	---
	Calendar Qtr	---	1.5 µg/m ³	Same as Primary
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m ³)	---	---
Visibility	8-hour	Extinction coefficient	---	---
Reducing Particles	observation	of 0.23 per kilometer ⁶	---	---

Notes:

- No standard; ppm = parts per million; µg/m³ = microgram per cubic meter; mg/m³ = milligrams per cubic meter
- 1. California standards for ozone, CO, SO₂, NO₂, and PM₁₀ and visibility reducing particles are values that are not to be exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In addition, Section 70200.5 lists vinyl chloride under standards for hazardous substances.
- 2. The form of the national standards (i.e., how the standard is applied) varies from pollutant to pollutant. For further information, 40 CFR Part 50 includes the relevant form for each federal standard.
- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parenthesis are based upon reference temperature of 25°C and a reference pressure of 760 mm of mercury. All measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume or micromoles of pollutant per mole of gas.
- 4. Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the U.S. EPA.
- 5. Secondary Standards: The levels of air quality necessary, to protect the public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standards within a "reasonable time" after the implementation plan is approved by U.S. EPA.
- 6. Prevailing visibility is defined as the greatest visibility, which is attained or surpassed around at least half of the horizon circle, but not necessarily in continuous sectors. Visibility standard expressed in terms of extinction due to particles when the relative humidity is less than 70 percent.

The criteria pollutants most relevant to air quality planning and regulation in the air basin include ozone, nitrogen dioxide, suspended particulate matter (e.g., PM₁₀ and PM_{2.5} - particles less than 10 microns in diameter, and 2.5 microns in diameter, respectively), and carbon monoxide.

Air Quality Management Planning Requirements

The ARB is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, the ARB undertakes research, sets state ambient air quality standards, establishes emission standards for motor vehicles, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The ARB also oversees each air basin in the state; Downey is located within the South Coast Air Basin, under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

The South Coast Air Basin has a history of recorded air quality violations and is an area where both state and federal air quality standards are exceeded (a discussion of air quality conditions follows). For areas not in attainment with federal standards, the federal Clean Air Act requires preparation of a state implementation plan (SIP) that demonstrates the means to attain the standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs. The California SIP is comprised of plans developed at the regional or local level. Plan components to be incorporated within the SIP must each be individually reviewed and approved by the U.S. EPA. For areas not in attainment with state standards, the California Clean Air Act requires triennial preparation of an Air Quality Management Plan (AQMP). The air quality management plans are prepared by the SCAQMD with technical and policy inputs from the U.S. EPA, the ARB, and the Southern California Association of Governments.

Southern California Association of Governments (SCAG)

SCAG is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan and Guide (RCPG) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RCPG is a framework for decision-making for local governments, assisting them in meeting federal and state mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes through the year 2015, and beyond. Policies within the RCPG include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

South Coast Air Quality Management District (SCAQMD)

The SCAQMD manages the efforts to achieve and maintain air quality standards in the air basin. The SCAQMD has the responsibility of preparing the air quality management plans that outline control strategies and programs designed to bring the South Coast Air Basin into attainment with the standards. SCAG and the SCAQMD have statutory responsibility for implementation and monitoring of strategies contained in the AQMP. The SCAQMD maintains primary responsibility

for the control of air emissions from stationary sources, while reserving an oversight role for the ARB. The SCAQMD is also responsible for the issuance of air permits, inspection of stationary sources, monitoring of ambient air quality, and planning activities, such as modeling and maintenance of the emission inventory. The SCAQMD is jointly responsible with SCAG for developing transportation control measures necessary to achieve the state ambient air quality standards.

Past Air Quality Planning Efforts

The 1990 amendments to the federal CAA require that ozone nonattainment areas submit revisions to the SIP that show how each airshed will re-establish attainment. In response, the 1991 Air Quality Management Plan (AQMP) was modified/adopted and submitted in 1991 as the South Coast Air Basin portion of the SIP. The 1991 SIP submittal estimated that an 85 percent basin-wide reduction in volatile organic compound (VOC) emissions and a 59 percent reduction in oxides of nitrogen (NO_x), between 1990 to 2010, was needed to meet federal clean air standards. About 40 percent of these reductions were to come from pollution control programs existing at the time. The rest were to come from new rules, technologies, or other reduction programs. The California Clean Air Act requires an update of the AQMP every three years.

1997 AQMP

The 1997 AQMP, as amended, outlines emission control strategies and programs that are designed to bring the South Coast Air Basin into attainment or maintain existing attainment with the state and federal ozone, carbon monoxide, nitrogen dioxide, and particulate matter standards. Components of the 1997 plan update include:

- Demonstration of attainment plan for ozone, CO, and PM₁₀;
- Base year 1993 emissions inventories of VOC, NO_x, CO, SO_x, and PM₁₀;
- Emissions budgets of the inventoried compounds for future years;
- An updated pollution control strategy; and
- Contingency measures if the plan, as presently proposed, fails to meet stated timetables.

The AQMP is jointly developed by SCAQMD in cooperation with SCAG, and the 1997 version was adopted by the SCAQMD in November 1996. In 1999, amendments were adopted to enhance and expand the control measures of the AQMP. According to the 1997 AQMP, as amended, attainment of all federal health standards would occur no later than the year 2000 for CO, the year 2006 for PM₁₀, and the year 2010 for ozone. Compliance with state standards for ozone and PM₁₀ would not be achieved until after the year 2010. Both the federal and state standards for nitrogen dioxide were met before publication of the 1997 AQMP.

Control measures of the AQMP focus on adoption of new regulations or enhancement of existing regulations for stationary sources and implementation/facilitation of advanced transportation technologies (i.e., telecommunication, zero emission and alternative-fueled vehicles and infrastructure, and both capital and non-capital transportation improvements). Capital improvements consist of high occupancy vehicle (HOV) lanes, transit improvements, traffic flow improvements, park and ride and intermodal facilities, and urban freeway, bicycle and pedestrian facilities. Non-capital improvements consist of rideshare matching and transportation demand management activities derived from the congestion management program.

City of Downey

The City of Downey has the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, Downey is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. Downey is also responsible for the implementation of transportation control measures as outlined in the AQMP. An example of such a measure is synchronized traffic signals.

3.2.3 Existing Conditions

Existing Regional Air Quality

Throughout the South Coast Air Basin, ozone is probably the pollutant of greatest concern. No single source accounts for most of the emissions of the ozone precursors NO_x and VOC, and the many sources are spread throughout the air basin. Ozone levels have varied widely at monitoring stations throughout the basin, depending on location and time of year, but the highest levels are generally recorded at stations in the interior valleys during warm, stable periods in summer and autumn. Particulate matter is also a pollutant of concern throughout the basin. The entire South Coast Air Basin is designated as a federal-level nonattainment area for ozone (extreme), CO, and PM₁₀, but the basin has recently improved from nonattainment to attainment with the NAAQS for NO₂. The air basin is a state-level nonattainment area for ozone, CO (Los Angeles County only), and PM₁₀.

In an effort to monitor the various concentrations of air pollutants throughout the South Coast Air Basin, the SCAQMD has divided the region into 27 source receptor areas (SRAs) in which 31 monitoring stations operate. The City of Downey is located within SRA 5, which encompasses the Whittier/Pico Rivera area. However, ambient air quality is no longer monitored within SRA 5. The area that is most representative of the air quality within SRA 5 is SRA 4, which encompasses South Coastal Los Angeles County. Table 3.2-2 provides background data on the ambient air quality conditions within SRA 4 through the period of 1997 to 1999.

TABLE 3.2-2
SUMMARY OF AMBIENT AIR QUALITY DATA IN
SOUTH COASTAL LOS ANGELES COUNTY

Pollutant	1997	1998	1999
Ozone			
Highest 1-hour	0.10 ppm	0.12 ppm	0.13 ppm
>0.12 ppm (exceeds NAAQS)	No	No	Yes (1 day)
>0.09 ppm (exceeds CAAQS)	Yes (1 day)	Yes (2 days)	Yes (3 days)
Highest 8-hour	0.07 ppm	0.08 ppm	0.08 ppm
>0.08 ppm (exceeds NAAQS)	No	No	No
Carbon Monoxide (CO)			
Highest 1-hour	9.0 ppm	8.0 ppm	7.0 ppm
>35 ppm (1-hour NAAQS)	No	No	No
>20 ppm (1-hour CAAQS)	No	No	No
Highest 8-hour	6.7 ppm	6.6 ppm	5.4 ppm
>=9.5 ppm (8-hour NAAQS)	No	No	No
>9.0 ppm (8-hour CAAQS)	No	No	No
Particulates (PM₁₀)			
Highest 24-hour	87 µg/m ³	69 µg/m ³	79 µg/m ³
>150 µg/m ³ (24-hour NAAQS)	No	No	No
>50 µg/m ³ (24-hour CAAQS)	Yes (10 days)	Yes (6 days)	Yes (13 days)

Legend:

Source: Air Quality Management District, 2001. <http://www.aqmd.gov/smog>.

On-road motor vehicles account for a large portion of the ozone precursors and CO emissions within the South Coast Air Basin. Large proportions of PM₁₀ emissions are attributed to construction activities and airborne dust from paved and unpaved roads due to vehicle travel. Therefore, control of motor vehicle emissions and construction activities is a major component of the regional air quality attainment plan. Industry and other stationary sources and activities make up the remainder of the man-made emissions.

Existing Local Air Quality

A mix of land uses such as residential, senior housing, and commercial are located in the vicinity of the project site. Local emissions sources include: stationary activities, such as space and water heating, landscape maintenance, and consumer products, and mobile sources—primarily automobile and truck traffic.

Motor vehicles are the primary source of pollutants within the project vicinity. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed CAAQS for CO are termed CO "hotspots." Section 9.4 of the SCAQMD's *CEQA Air Quality Handbook* identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots.

The SCAQMD recommends the use of CALINE4, a dispersion model for predicting CO concentrations, as the preferred method of estimating pollutant concentrations at sensitive receptors

near congested roadways and intersections. For each intersection analyzed, CALINE4 adds roadway-specific CO emissions calculated from peak hour turning volumes to ambient CO air concentrations. For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District. The simplified model is intended as a screening analysis, which identifies a potential CO hotspot. If a hotspot is identified, the complete CALINE4 model is utilized to determine the CO concentrations at sensitive locations in the vicinity of the intersections in question. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case, CO concentrations.

Maximum CO concentrations were calculated for peak hour traffic volumes at the five intersections in the project vicinity that experience the most congestion and would be most impacted by the proposed project (as assessed in Section 3.9). The results of these calculations are presented in Tables 3.2-3A and 3.2-3B for representative receptors located 50, 100, and 300 feet from each roadway. As shown, existing CO concentrations near these intersections do not exceed identified ambient air quality standards.

**TABLE 3.2-3A
SUMMARY OF EXISTING LOCALIZED CO ANALYSIS (1-HOUR)**

Intersection	1-Hour CO Concentrations (ppm)		
	50 Feet from Roadway Edge	100 Feet from Roadway Edge	300 Feet from Roadway Edge
Lakewood Blvd. at Firestone Blvd.	10.3	8.9	7.1
Lakewood Blvd. at Bellflower Blvd.	7.8	7.0	6.0
Lakewood Blvd. at Stewart & Gray Rd.	7.5	6.9	6.0
Lakewood Blvd. at Imperial Hwy.	9.0	8.0	6.6
Bellflower Blvd. at Imperial Hwy.	8.9	7.9	6.6
1-Hour Ambient Air Quality Standard	20.0	20.0	20.0

Source: EIP Associates, 2001.

**TABLE 3.2-3B
SUMMARY OF EXISTING LOCALIZED CO ANALYSIS (8-HOUR)**

Intersection	8-Hour CO Concentrations (ppm)		
	50 Feet from Roadway Edge	100 Feet from Roadway Edge	300 Feet from Roadway Edge
Lakewood Blvd. at Firestone Blvd.	7.9	6.9	5.6
Lakewood Blvd. at Bellflower Blvd.	6.1	5.6	4.9
Lakewood Blvd. at Stewart & Gray Rd.	5.9	5.5	4.9
Lakewood Blvd. at Imperial Hwy.	7.0	6.3	5.3
Bellflower Blvd. at Imperial Hwy.	6.9	6.2	5.3
8-Hour Ambient Air Quality Standard	9.0	9.0	9.0

Source: EIP Associates, 2001.

Existing Site Emissions

The project site contains some 124 buildings, structures, and other built features. The largest of these buildings along with three smaller buildings are sometimes used for motion picture production. Emissions are generated on a daily basis by landscape maintenance equipment, set production (such as paints), and automobile trips to and from the site.

3.2.4 Thresholds Of Significance

The South Coast Air Quality Management District recommends evaluating projects in terms of the following air pollution thresholds (Chapter 6, CEQA Air Quality Handbook, SCAQMD, 1993). The proposed project would be considered significant if implementation of the project would result in one or more of the following:

- Daily construction-related emissions exceeding any of the thresholds in Table 3.2-4;
- Daily operation-related emissions exceeding any of the thresholds in Table 3.2-4;
- Daily operation-related emissions cause the state 1-hr or 8-hr CO standard to be exceeded; or
- Operation-related emissions cause an exceedance of any additional screening criteria.

**TABLE 3.2-4
SCAQMD THRESHOLDS OF SIGNIFICANCE
FOR CONSTRUCTION AND OPERATIONAL EMISSIONS**

Pollutant	ROC	NO _x	CO	PM ₁₀	SO _x
Construction Emissions (lb/day)	75	100	550	150	150
Operational Emissions (lb/day)	55	55	550	150	150

Source: SCAQMD, CEQA Air Quality Handbook, 1993. Chapter 6, Determination the Air Quality Significance of a Project.

The additional screening criteria recommended by the SCAQMD are discussed below. The screening criteria identify projects that would be inconsistent with growth projections or air quality plans, create objectionable odors, or emit hazardous emissions or emissions of toxic air contaminants. These criteria will be used in conjunction with the above thresholds to determine if the proposed project would have a significant air quality impact. The Initial Study prepared for this project found no potential impacts related to emissions of odors.

3.2.5 Impacts

Less Than Significant Impacts

Increased Localized CO Concentrations

As was done to assess existing CO concentrations, the simplified CALINE4 screening procedure was used to predict future CO concentrations at the study intersections in the project area in 2006 when

the project is expected to be completed. The results of air emissions modeling for the project study area are shown in Tables 3.2-5A and 3.2-5B. As shown, future CO concentrations near these intersections would not exceed identified ambient air quality standards when the project site is fully occupied and operational. Therefore, CO hotspots are not predicted to exist near these intersections in the future and the contribution of project traffic-related CO at these intersections would not be considered significant.

**TABLE 3.2-5A
SUMMARY OF FUTURE LOCALIZED CO ANALYSIS (1-HOUR)**

Intersection	1-Hour CO Concentrations (ppm)		
	50 Feet from Roadway Edge	100 Feet from Roadway Edge	300 Feet from Roadway Edge
Lakewood Blvd. at Firestone Blvd.	9.4	8.2	6.8
Lakewood Blvd. at Bellflower Blvd.	8.5	7.6	6.3
Lakewood Blvd. at Stewart & Gray Rd.	8.3	7.4	6.3
Lakewood Blvd. at Imperial Hwy.	8.9	7.9	6.5
Bellflower Blvd. at Imperial Hwy.	8.6	7.7	6.5
1-Hour Ambient Air Quality Standard	20.0	20.0	20.0

Source: EIP Associates, 2001.

**TABLE 3.2-5B
SUMMARY OF FUTURE LOCALIZED CO ANALYSIS (8-HOUR)**

Intersection	8-Hour CO Concentrations (ppm)		
	50 Feet from Roadway Edge	100 Feet from Roadway Edge	300 Feet from Roadway Edge
Lakewood Blvd. at Firestone Blvd.	7.2	6.4	5.4
Lakewood Blvd. at Bellflower Blvd.	6.6	6.0	5.1
Lakewood Blvd. at Stewart & Gray Rd.	6.4	5.8	5.0
Lakewood Blvd. at Imperial Hwy.	6.9	6.2	5.2
Bellflower Blvd. at Imperial Hwy.	6.7	6.0	5.2
8-Hour Ambient Air Quality Standard	9.0	9.0	9.0

Source: EIP Associates, 2001

Consistency with Air Quality and Growth Projection Plans

The 1997 AQMP, discussed previously, has been prepared to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact on the economy. Projects which are considered to be consistent with the AQMP do not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds.

Projects that are consistent with the projections of employment and population forecasts identified in the Growth Management Chapter of the RCPG are considered consistent with the AQMP growth projections. This is because the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP. As discussed in Section 3.7 Population and Housing, the proposed project is consistent with the projected growth in jobs in the Gateway Cities Subregion, which anticipates the provision of 59,600 jobs in the subregion from 2000 to 2005. Therefore, the project would be consistent with AQMP attainment forecasts.

Another measurement tool in determining consistency with the AQMP is to determine how a project accommodates the expected increase in population or employment. Generally, if a project is planned in a way that results in the minimization of vehicle miles traveled (VMT) both within the project and the community in which it is located, and consequently the minimization of air pollutant emissions, that project is consistent with the AQMP.

The project includes a mix of land uses that allow employees to remain on-site while they walk to get food or shop. The commercial uses would also serve existing residents in the local vicinity. This means that employees and local residents could walk or ride bicycles to, from, or within the site, and the distance that people would otherwise need to drive would be reduced. This is consistent with the goals of the AQMP for reducing the emissions associated with new development.

Kaiser also implements an aggressive transportation demand management (TDM) program at all of its medical center campuses. The program includes special parking for carpools, subsidies for public transportation, ride-sharing programs, and incentives for using the aforementioned forms of alternative transportation, including also walking or bicycling to work. This program is also consistent with AQMP goals for reducing emissions at large employment centers.

Release of Toxic Air Contaminants

Toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the proposed land uses within the Downey Landing, LLC project. Only common forms of hazardous or toxic substances typically used, stored, or sold in conjunction with retail, office, and film making activities would be present in small quantities. Most uses of such substances would occur indoors. Based on the common uses expected on the site, no significant impacts are expected to occur in association with the Downey Landing, LLC project.

As discussed in Section 3.3 Hazards and Hazardous Materials, the Central Supply department within the Kaiser project would provide for sterilization of medical instruments and equipment, using a highly toxic gas, ethylene oxide (Eto). Eto is a strictly regulated gas, controlled by the State and local air quality management districts. The Eto units in the proposed hospital would be enclosed in a specialized room away from the main corridors and patient rooms, and equipped with

sensors to detect any escape of Eto into the work room. The Eto units would release the spent gas into vents which are equipped with chemical scrubbers that reduce the concentration of Eto to non-toxic levels. The state requires that facilities utilizing 25-600 pounds per year of Eto maintain a 99% emission control rate. For facilities using greater than 600 lbs per year, an emission control of 99.9 % must be maintained. Compliance with these regulations would reduce the potential impact of this gas to less than significant levels.

Potentially Significant Impacts

Implementation of the proposed project would not result in any potentially significant air quality impacts.

Significant, Unavoidable Impacts

Impact 3.2-1: Daily Demolition and Construction Emissions

Construction activities are expected to occur in phases over a five-year period. Three basic types of activities would be expected to occur and cause emissions during construction. First, existing structures on the site would be demolished and existing parking surfaces cleared. Following demolition, the site would be prepared (graded) to accommodate the building foundations and parking areas. The buildings would then be constructed and readied for use.

Because of the construction time-frame, overlapping of building phases, and the normal day-to-day variability in construction activities, it is difficult, if not impossible, to precisely quantify the daily or quarterly emissions associated with each phase of the proposed construction activities. Table 3.2-6, nonetheless, identifies daily emissions associated with typical equipment for the different construction phases planned for the project. These calculations also assume that appropriate dust control measures would be implemented during each phase of the project as required by SCAQMD Rule 403 - Fugitive Dust.

TABLE 3.2-6
ESTIMATED DAILY CONSTRUCTION EMISSIONS

Construction Activity	Peak Day Emission per Activity (lb/day)				
	CO	ROC	NOx	SOx	PM ₁₀
Demolition:	87.6	19.2	163.2	18.0	29.5
Site Preparation:	72.5	16.4	199.8	26.1	147.1
Construction:	64.5	66.3	165.0	9.8	31.5
Significance Thresholds for Peak Daily Emissions	550.0	75.0	100.0	150.0	150.0

Source: EIP Associates, February 2001.

Maximum daily emissions occur during site preparation periods when several pieces of heavy-duty equipment would move earth materials around on the site. During construction activities involving on-site use of heavy equipment, emissions generated by this equipment would exceed SCAQMD significance thresholds for NOx. Because emissions of NOx would exceed the SCAQMD thresholds, a significant impact would occur.

Implementation of the identified mitigation (Mitigation Measures 3.2-1 and 3.2-2) would reduce the impacts of construction-related emissions of NOx and PM₁₀, but not to levels that would be considered less than significant, and impacts resulting from construction-related emissions would remain significant and unavoidable.

Impact 3.2-2:

Daily Operational Emissions

Operational emissions would be generated by both stationary and mobile sources as a result of normal day-to-day activities on the project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, and the operation of landscape maintenance equipment. Mobile emissions would be generated by the motor vehicles traveling to and from the project site. A central plant within the Kaiser development would utilize natural gas for the operation of boilers to heat building space and water for that development. The emissions generated by the central plant would be subject to the separate permit requirements of the SCAQMD, as well as the development approval requested of the City of Downey as assessed in this EIR.

The analysis of daily operational emissions has been prepared utilizing the URBEMIS7G computer model recommended by the SCAQMD. The results

of these calculations are presented in Table 3.2-7 for the Downey Landing, LLC Development, Table 3.2.8 for the Kaiser Development, and Table 3.2-9 for the combined Projects. These tables show that the daily emissions generated by each individual development, as well as the project as a whole, would exceed SCAQMD thresholds for ROG, NO_x, CO, and PM₁₀. Although air quality calculations are based on a previous site plan, the revised site plan would not change impacts.

**TABLE 3.2-7
SUMMARY OF DAILY OPERATIONAL EMISSIONS – DOWNEY LANDING,
LLC DEVELOPMENT**

Operational Activity	ROC (lb/day)	NO _x (lb/day)	CO (lb/day)	PM ₁₀ (lb/day)
Water and Space Heating Sources	1.1	14.5	5.8	0.0
Landscape Maintenance Sources	0.6	0.0	4.0	0.0
Vehicular Sources	239.0	309.0	1,674.5	164.4
Total Operational Emissions	240.7	323.5	1,684.2	164.5
Significance Threshold	55.0	55.0	550.0	150.0

Notes: Estimates are results of modeling using the California Air Resources Board's URBEMIS7G computer program. Numbers may not add exactly in the table due to rounding in the computer model.

Source: EIP Associates, 2001.

**TABLE 3.2-8
SUMMARY OF DAILY OPERATIONAL EMISSIONS – KAISER
DEVELOPMENT**

Operational Activity	ROC (lb/day)	NO _x (lb/day)	CO (lb/day)	PM ₁₀ (lb/day)
Central Plant (water and space heating)	0.5	6.7	2.7	0.0
Landscape Maintenance Sources	0.2	0.0	1.6	0.0
Vehicular Sources	190.7	287.5	1,492.4	164.4
Total Operational Emissions	191.4	294.2	1,496.6	164.5
Significance Threshold	55.0	55.0	550.0	150.0

Notes: Estimates are results of modeling using the California Air Resources Board's URBEMIS7G computer program. Numbers may not add exactly in the table due to rounding in the computer model.

Source: EIP Associates, 2001.

TABLE 3.2-9
SUMMARY OF DAILY OPERATIONAL EMISSIONS – COMBINED DOWNEY
LANDING, LLC AND KAISER DEVELOPMENTS

Operational Activity	ROC (lb/day)	NO _x (lb/day)	CO (lb/day)	PM ₁₀ (lb/day)
Water and Space Heating Sources	1.5	21.1	8.5	0.0
Landscape Maintenance Sources	0.8	0.0	5.5	0.0
Vehicular Sources	402.8	553.3	2,938.5	305.1
Total Operational Emissions	405.0	574.5	2,951.7	305.2
Significance Threshold	55.0	55.0	550.0	150.0

Notes: Estimates are results of modeling using the California Air Resources Board's URBEMIS7G computer program. Numbers may not add exactly in the table due to rounding in the computer model.

Source: EIP Associates, 2001.

Implementation of the identified mitigation (Mitigation Measures 3.2-3 through 3.2-11) would reduce the impacts of each pollutant, but not to levels that would be considered less than significant, and impacts resulting from the operation of the project would remain significant and unavoidable.

3.1.6 Cumulative Impacts

The SCAQMD's *CEQA Air Quality Handbook* identifies three possible methods to determine the cumulative significance of land use projects. The method employed for this analysis is that the project shows a one percent per year reduction in project emissions of ROC, NO_x, CO, and PM₁₀. This method differs from the methodology used in other sections of this EIR in which all foreseeable future development within a given service boundary or geographical area is predicted and their impacts measured. The SCAQMD has not identified thresholds to which the total emissions of all cumulative development can be compared. Instead, the SCAQMD's methods are based on performance standards and emission reduction targets necessary to attain the air quality standards identified in the AQMP. According to the *CEQA Air Quality Handbook*, projects which are consistent with the AQMP performance standards and emission reduction targets should be considered less-than-significant unless there is other pertinent information to the contrary. The performance standard that is applicable to this project is a minimum one percent reduction per year in emissions. Table 3.2-10 shows the reduction in daily emissions that would be provided by the mitigation measures recommended later in this EIR section. As shown, the reduction of each pollutant type ranges from 6.3 to 7.2 percent. Based on this, the project would meet the performance standard for annual emissions reductions and would not be considered cumulatively significant.

**TABLE 3.2-10
AIR QUALITY MITIGATION MEASURE EFFECTIVENESS**

Development Condition	ROC (lb/day)	NO _x (lb/day)	CO (lb/day)	PM ₁₀ (lb/day)
Unmitigated Daily Operational Emissions	432.1	617.7	3,180.9	328.9
Mitigated Daily Operational Emissions	405.0	574.5	2,951.7	305.2
Total Reduction (lb/day)	27.1	43.3	229.2	23.8
Total Reduction (percent)	6.3%	7.0%	7.2%	7.2%

Notes: Estimates are results of modeling using the California Air Resources Board's URBEMIS7G computer program.

Source: EIP Associates, 2001.

3.2.7 Mitigation

Mitigation Measure 3.2-1: Develop and implement a construction management plan, as approved by the City of Downey, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

- Configure construction parking to minimize traffic interference.
- Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person).
- Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the degree practicable.
- Re-route construction trucks away from congested streets.
- Consolidate truck deliveries when possible.
- Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.
- Maintain equipment and vehicle engines in good condition and in proper tune as per manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.
- Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at 800/242-4022 for daily forecasts.

- Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices.
- Use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices.

Mitigation Measure 3.2-2: Implement all rules and regulations by the Governing Board of the SCAQMD which are applicable to the development of the project (such as Rule 402 – Nuisance and Rule 403 – Fugitive Dust) and which are in effect at the time of development. The following measures are currently recommended to implement Rule 403 – Fugitive Dust. These measures have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation.

- Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more).
- Replace ground cover in disturbed areas as quickly as possible.
- Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, and dirt) according to manufacturers' specifications.
- Water active grading sites at least twice daily.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.

- Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available).
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.
- Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.
- Enforce traffic speed limits of 15 miles per hour or less on all unpaved roads.

Mitigation Measure 3.2-3: All new structures constructed on the Downey Landing, LLC project site shall utilize solar or low emission water heaters to reduce natural gas consumption and emissions.

Mitigation Measure 3.2-4: All new structures constructed on the site shall have wall and attic insulation that exceeds current Title 24 requirements by at least five (5) percent.

Mitigation Measure 3.2-5: The site plans developed for the project shall incorporate transit shelters and benches at appropriate locations along the site perimeter. The transit stops shall include route signs and displays.

Mitigation Measure 3.2-6: The site plans developed for the project shall incorporate street lighting that illuminates pedestrian pathways.

Mitigation Measure 3.2-7: The landscape plans developed for the project shall identify the location of shade trees to shade on-site sidewalks.

Mitigation Measure 3.2-8: The site plans developed for the project shall incorporate street furniture along on-site pedestrian pathways.

Mitigation Measure 3.2-9: The site plans developed for the project shall incorporate pedestrian safety designs and infrastructure at street/driveway crossings.

Mitigation Measure 3.2-10: The site plans developed for the project shall incorporate secure bicycle parking features.

Mitigation Measure 3.2-11: The site plans developed for the non-commercial areas of the project shall designate preferential parking spaces for carpool/vanpool parking.

3.3 Hazards and Hazardous Materials

3.3.1 Introduction

The Initial Study prepared for this project (which is included as Appendix A of this document) determined that project-related impacts regarding hazards and hazardous materials associated with the proposed hospital and medical office uses could be potentially significant. Therefore, this section considers the potential effects of project-related increases in the risk of exposure of persons to soil contaminants. The information included in this section has been compiled from a Soil Investigation Report prepared by SCS Engineers for the City of Downey in 1998, an Environmental Assessment (EA) prepared for the project site by NASA in 2000, a Phase I Environmental Site Assessment prepared by Law/Crandall for Kaiser Permanente, and a Human Health Risk Assessment prepared by Kaiser Permanente: each of these documents is hereby incorporated by reference in its entirety. Some information has also been obtained from consultation with involved parties. Full bibliographic entries to reports cited in this section are provided in Chapter 7.0 (References) of this EIR.

3.3.2 Existing Conditions

Existing and Surrounding Land Uses

Existing, on-site land uses comprise:

- Vacant NASA/Rockwell/Boeing buildings (though Building One and some others are used occasionally for motion picture production);
- Vacant, undeveloped lots; and
- Vacant parking uses.

The site contains some 124 buildings, structures, and other built features (Earth Tech 1999, 4-1). Building One is the most prominent of these, and encompasses about 913,023 sq. ft. Due to its size and configuration, Building One is sometimes used for motion picture production, as are Buildings 11, 14, 39, 288, and 6/290.

Surrounding land uses include:

- Low-, Low/Medium-, and Medium-Density Residential uses to the north and northeast, across Stewart & Gray Road and Bellflower Boulevard;
- Neighborhood Commercial, Medium-Density Residential, and School uses to the west, across Lakewood Boulevard;

- General Commercial uses to the west, between Clark Avenue and Lakewood Boulevard;
- Medium-Density Residential uses west of Clark Avenue, south of Imperial Highway;
- Medium-Density Residential, Commercial Manufacturing, Independence Park, a Public Works yard, and Neighborhood Commercial uses to the east, across Bellflower Boulevard;
- Kaiser Permanente medical offices, adjacent to the project site's southeast boundary; and
- Los Angeles County office and education complexes, a Kaiser Permanente maintenance complex, and General Commercial uses to the south of the project site, across Imperial Highway.

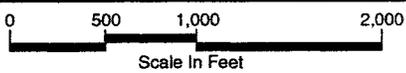
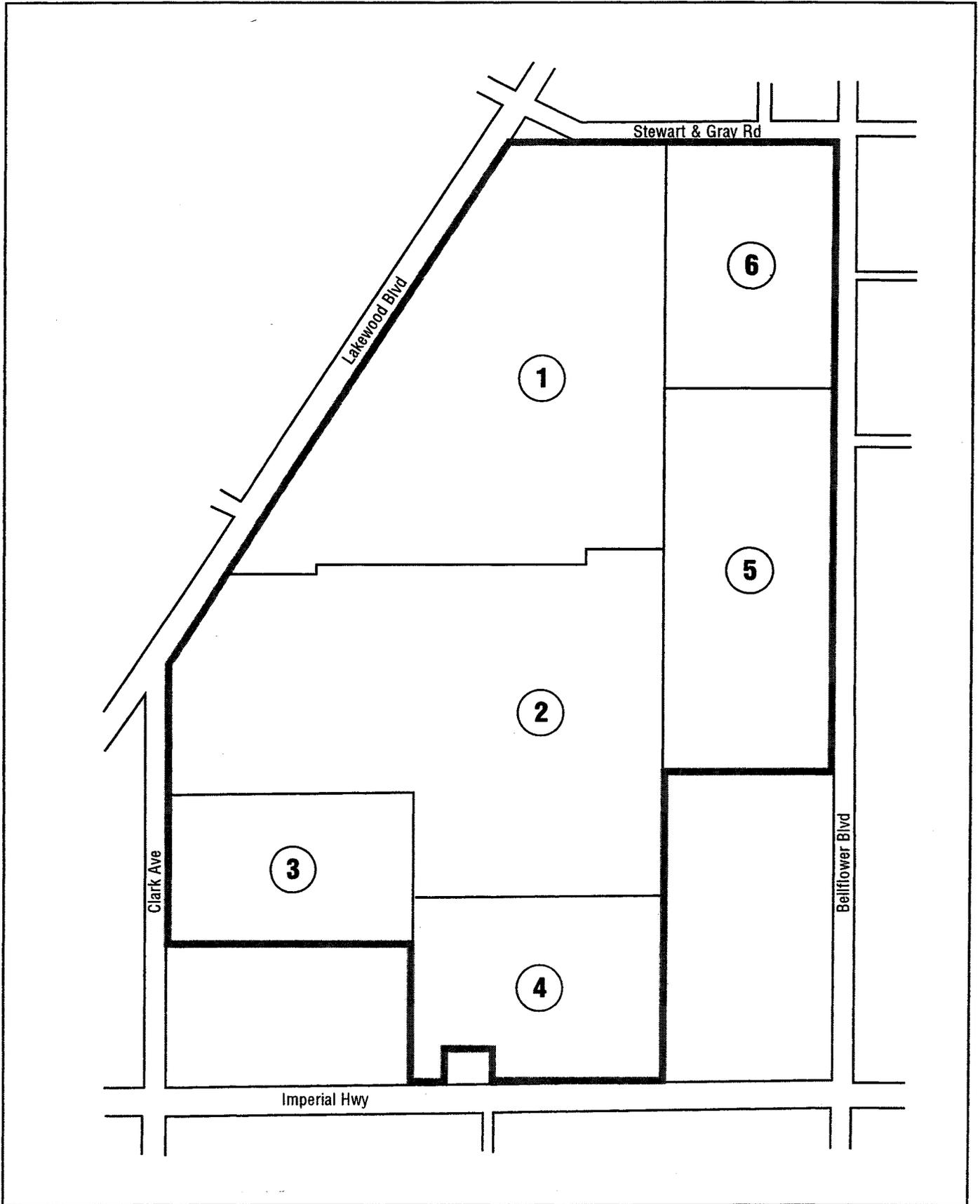
Background of Previous Investigations

Areas of the site have been used for aerospace manufacturing and related activities since 1929. The facilities were operated by a succession of organizations, including Vultee, North American, the U.S. Air Force, and NASA. Figure 3.3-1 shows the parcel configuration and numbers employed for the purposes of those investigations summarized in this section.

An EA prepared by NASA (2000) stated that manufacturing and associated activities on Parcels 1 and 2 either generated or involved the use of sump waste, process solution, oil/coolant, debris, paint/thinner, and sulfuric acid. At the time of closure, all hazardous wastes associated with plant operations will have been collected from all designated accumulation areas on-site, and disposed off-site at a permitted facility.

The *Soil Investigation Report* prepared by SCS Engineers in 1998 presented testing results for parcels 3, 4, 5, and 6, which encompass about 67 acres of the project site. The principal activities conducted on each of these parcels are summarized below:

- **Parcel 3:** Materials storage, automobile parking and aircraft runway. Fuel underground storage tanks (USTs) were located on an adjacent parcel.
- **Parcel 4:** Material storage, dumpster storage, above ground propane and other tanks, fuel UST, mechanical test facilities, and aircraft runway.
- **Parcel 5:** Machining and other industrial processes, sumps, fuel UST, hazardous and other waste storage, hazardous materials storage, aircraft runway and helicopter landing, and possible waste disposal to ground. A fuel UST is located on an adjacent parcel.
- **Parcel 6:** Automobile parking, aircraft runway and helicopter landing, possible waste disposal to ground surface. A fuel UST, industrial processes, sumps, degreasing, plating and other industrial processes, and hazardous materials storage occurred on an adjacent parcel.



Downey NASA Site - Conveyed Parcels FIGURE 3.3-1
City of Downey

SOURCE: Stevens/Garland Associates

10552-00

The activities known to occur on-site, and the materials employed, as well as on adjacent parcels, the classes of chemicals that were determined to be of potential environmental concern included the following:

- Volatile Organic Compounds (VOCs),
- Heavy (trace) materials,
- Petroleum hydrocarbons, and
- Polychlorinated biphenyls (PCBs).

Based on historical data, other chemicals of lower environmental concern, including nitrogen and phosphorus compounds, may have the potential to occur on certain portions of the site (SCS 1998).

Historical Uses of Surrounding Properties

According to Law/Crandall (2001, p. 19), Foster-Wheeler's study of historical uses surrounding the site identified areas of potential environmental concern. These included a possible waste ditch formerly identified in the northwest portion of Parcel 5; aircraft activities associated with the former runways; previous activities (ground stains and soil piles) on the southwest portion of Parcel 5, and a possible subsurface drainage line that ended at a concrete culvert on Parcel 5.

Known and Potential Contamination Sites on the Project Site

The following discussion is based on descriptions of sites investigated as part of NASA's site remediation effort, as well as the Phase I ESA prepared by Law/Crandall in 2001.

Parcel 1

Chemical Contamination

Soil samples from 12 borings contained detectable concentrations of volatile organic compounds (VOCs). Borings that reached groundwater also yielded detectable concentrations of VOCs. However, with the exception of two locations, (near Buildings 25 and 244), VOC concentrations did not exceed their respective Preliminary Remediation Goals (PRGs) established by the EPA for residential and industrial soils. Studies also suggested that shallow soils across the area are affected by low concentrations of chlorinated solvents, such as methylene chloride, acetone, and tetrachloroethene (PCE). In another area east of Building 277, VOC concentrations were below the PRGs, but exceeded the Soil Cleanup Screening Level (SCSL) for PCE (NASA 2000). The sumps in Buildings 244 and 277 are therefore considered to contribute to the PCE concentrations in the groundwater.

Groundwater samples from Parcels 1 and 2 also exhibited detectable concentrations of trichloroethene (TCE), which exceed Maximum Contaminant Levels of the California Primary Drinking Water Standards. Although first water-bearing zone is not used for drinking water, the California Water Code considers the shallow groundwater to have a beneficial use. Based on the absence of TCE in shallow soil samples on the site, and upon the presumed groundwater gradient (i.e., flow towards the south/southwest), the TCE likely originates from an off-site, upgradient source north of Stewart & Gray Road. The California Regional Water Quality Control Board (CRWQCB) has identified an isolated contaminated plume of TCE in the groundwater on Parcel 2; however, the source of this contaminant has not been identified.

A 1942 drawing indicated that eight USTs beneath Building 25 contained stored wastewater, paint, mineral spirits, and other hydrocarbons. Building 25 was used at the time for painting and solvent storage, and later for miscellaneous equipment storage. The eight USTs were all identified and removed, and soil samples were obtained and tested according to the guidance of the Los Angeles County Department of Public Works Environmental Office. A final report that was submitted recommended closure with no further action. This site was referred by Los Angeles County to the RWQCB, as lead agency for the facility. Site closure is pending correspondence from the RWQCB (Hickens 2001, pers. comm.).

Building 244 was used for chemical mill operations in the late 1950s and early 1960s. Numerous above-ground chemical processing tanks were located in this area, and overflow from these tanks may have been discharged to a floor ditch that ultimately drained into a sump. Soils adjacent to a sump inside of Building 244 contained elevated concentrations of VOCs: the distribution of soils had been partially determined at the time of the authorship of the 2000 EA (NASA), and at the time of preparation of the EIR, a work plan had been approved by the Regional Water Quality Control Board (RWQCB). A soil vapor extraction (SVE) program has been in operation for approximately six months.

Elevated concentrations of VOCs have been identified adjacent to a sump east of Building 277. The sump received overflow from chemical processing operations in Buildings 276 and 277. According to NASA's EA (2000, p. 3-15), a work plan for additional assessment had been submitted to and approved by the RWQCB. NASA's Johnson Space Center (JSC) staff are presently reviewing the final report for this effort and will make a recommendation to the RWQCB for no further action.

Radiation Contamination

The northeastern portion of Building 1, where the loading dock is now located, once housed a 4-watt nuclear reactor, which was used by the Atomic Energy Research Department of North American Aviation from 1948 to 1955. In December of 1955, all work was moved to Canoga Park under a new division (Atomics International) of North American Aviation. The reactor

was moved in 1956, and available information from the 1950s indicated that the facility was not left in a contaminated condition. All isotopes stored on-site after this period were disposed of in the early 1990s. Because information regarding these early activities is highly incomplete, Boeing agreed that a Radiation Safety Survey be conducted for the project site. The study, which was completed in March 2001, was designed to demonstrate compliance with applicable regulatory release criteria by measuring the residual radioactivity from radiological operations on the site during the period described above. Detailed data for each measurement are available in the appendix of the report. The report is on file and available for review at the City of Downey Planning Department.

The survey included 464 total alpha and beta surface contamination instrument measurements and 460 removable wipe samples. All measurements and wipe samples demonstrated compliance with appropriate regulatory cleanup standards (DCGLs). None of the net values obtained from the measurements and wipe samples exceeded the DCGLs, even without subtraction of background radiation values, and the majority of the measurements and samples did not even exceed the minimum detectable activity of the instruments or counters.

The survey also included 464 surface gamma exposure rate measurements, all of which were within the measured background range. All gamma spectrometry of soil, paint, concrete, and water samples yielded no evidence of man-made contamination, and indicated that regulatory clean-up standards promulgated by the Department of Energy, Nuclear Regulatory Commission, and California Department of Health Services were met. The area is therefore suitable for release for "unrestricted use" with no radiological restrictions.

Parcel 2

Samples from soils borings and groundwater penetration borings contained detectable concentrations of VOCs. As of August 2001, TEC and tetrachloroethene (PCE) were detected in groundwater beneath Parcel 2. TCE ranged in concentration from 26micrograms per liter ($\mu\text{g}/\text{l}$) to 170 $\mu\text{g}/\text{l}$. PCE ranged in concentration from 8.4 $\mu\text{g}/\text{l}$ to 16 $\mu\text{g}/\text{l}$. The concentrations of both PCE and TCE exceeded the State of California Department of Health Services Maximum Contaminant Levels (MCLs) of 5 $\mu\text{g}/\text{l}$ for these compounds; however, the groundwater monitoring wells located upgradient from Parcel 1 (which is also upgradient from Parcel 2) indicate PCE concentrations ranging from <7.5 $\mu\text{g}/\text{l}$ to 14 $\mu\text{g}/\text{l}$. TCE concentrations in the upgradient monitoring wells ranged from 120 $\mu\text{g}/\text{l}$ to 1,200 $\mu\text{g}/\text{l}$. The VOC levels in the soil sample did not exceed the PRGs of the EPA or the RWQCB SCSLs, but groundwater penetration samples near Buildings 6 and 290 contained detectable VOC concentrations that likely resulted from the use of solventsboth an above- and a below-ground storage tank are located near and within Building 289, respectively. The UST was

used for emergency spill containment. No obvious signs of spill were observed near the above-ground storage tank (AST).

Parcel 3

Borings drilled in the former storage area on this parcel did not yield significant soil pollutant impacts (SCS 1998).

Parcel 4

Soils samples collected in the northwestern portion of Parcel 4, near the UST, yielded only low concentrations of fuel hydrocarbons. PCE was detected at concentrations ranging from 6 g/kg to 402 g/kg, and TCE was detected at concentrations ranging from 7 to 113 g/kg. Although other areas that were not sampled may have had greater impacts, SCS's 1998 investigation and previous investigations by Earthtech (1996) suggest that no significant contamination has occurred. In the southeastern portion of this parcel, no impacts were detected either. However, sampling detected soil and groundwater contamination in the southern portion of the parcel, adjacent to the Spartan Chemical facility.

Parcel 5

Sampling indicated VOC and PCE impacts in the northern portion of Parcel 5, and TCE impacts near Building 255 (a hazardous waste storage facility). According to Law/Crandall (2001), three USTs (numbers 8, 9, and 20, according to Foster-Wheeler 1996) were once present, but were removed and given clearance by the Los Angeles County Department of Public Works (LACDPW). Additionally, fuel lines that connected USTs 8 and 9 are documented to have conveyed JP-4 jet fuel, and have been capped and abandoned in place. A UST is also in use near Building 249: Law/Crandall observed Air Quality Management District (AQMD) permits for operation of an emergency diesel generator and a 550-gallon diesel UST. Building 260 was described by Foster-Wheeler (1999) as an underground pneumatic test cell that used freon.

Building 230/237 (adjoining structures) included nine 55-gallon drums that had leaked a dark, tar-like substance onto the concrete floor. The spill was limited to the immediate vicinity of the drums. The material was unknown; however, the area of Building 237 (former machining operations) exhibited no significant contaminant levels.

Building 235 was used for hazardous materials storage. Storage and containment areas were observed, and the concrete in some areas had been corroded. Law/Crandall also observed a linear trench drain associated with a clarifier or sump adjacent to the building, as well as a sump pit, covered with steel plates, in a canopy-covered area adjacent to the structure. Additionally, Foster-

Wheeler (1999) reported that some buildings—but primarily Building 235—were used for hazardous materials storage.

In addition to the structures and associated USTs, three large dumpsters on the project site in Parcel 5 were filled with miscellaneous construction debris that was removed from buildings on the project site.

Parcel 6

TCE was detected in the southeastern and northwestern portions of this parcel. Some of this contamination may be related to groundwater contamination. Borings in the southwestern portion of this parcel yielded no evidence of soil contamination.

The SCS report (1998) reported that, taken as a whole, shallow soil surveys and soil sample analyses indicate only minor impacts to soils above the groundwater table in Parcels 3, 4, 5, and 6. This statement is based upon the relatively low observed concentrations of VOCs during the soil vapor survey, and low to undetectable VOC levels in soil samples. Additionally, the higher concentrations of TCE were detected in the 40-foot range, near the groundwater saturation level. Both of these observations suggest that TCE and possibly other VOCs at that depth resulted from migration through groundwater, possibly from an off-site, upgradient source. However, the following areas may have been affected by impacts originating from near the surface:

- The northern portion of Parcel 4, PCE and 1,1,1 TCA were found in 20-foot-deep soils at somewhat higher concentrations than elsewhere on the site.
- Low concentrations of TCE were detected at depths of 15 and 20 feet near Building 235. The higher concentrations of TCE at 40 feet are probably related to groundwater contamination.
- Detection of PCE in the northern portion of Parcel 5 may indicate that a surface spill occurred. No PCE was detected at 15 feet, which may indicate limited migration of the pollutant.
- Detection of TCE in southeast and northwest Parcel 6 may indicate a contamination source other than groundwater in this location.

Electrical Transformers

Electrical equipment was observed in or near four structures in Parcel 5: Buildings 201, 237, 231, and near 260/289. Building 201 included former electrical substations 202 and 203, and although soils were previously affected by PCBs, the area was reportedly remediated (Law/Crandall 2001, p.14). Building 237 housed former substation 204. Building 231 included an inactive transformer that was labeled "No PCBs". Finally, a fenced enclosure near Buildings 260 and 289 includes electrical panels associated with a Southern California Edison electrical transfer substation. The substation was used

to distribute electricity to the entire site, and the City and Applicants anticipate continued use of the substation during project operation.

Asbestos

Renovation or demolition of buildings with asbestos-containing material (ACM) can potentially release asbestos fibers into the air (NASA 2000). ACM includes materials such as pipe and boiler insulation, acoustical ceilings, sprayed-on fireproofing, and other soundproofing or insulation. NASA policy during its ownership of the project site consisted of managing ACM in place, and ACM is removed only when a potential exists for a release of asbestos that could affect human health or the environment (NASA 2000, p. 3-16).

NASA contracted for an asbestos survey in 1986 of structures on the project site. The survey identified ACM in Buildings 1, 3, 4, 6, 9, 11, 14, 41, 56, 61, 119, 128, 229, 239, 244, 246, 276, 286, 287, 288, 289, 290, 299, 305, and 999 (NASA 2000, pp. 3-16, 3-17).

Lead-Based Paint

NASA has conducted no specific studies with regard to lead-based paint, because no "high-priority" facilities (housing, elementary schools) are present on-site. However, many of the buildings on-site were constructed prior to 1978 and are therefore considered likely to contain lead-based paint.

Previous and Current Remediation Activities

Previous Remediation Activities

In addition to previous removals and remediation discussed above, work plans for remediation of contaminated sites and removal of USTs on Parcels 3, 4, 5, and 6 have been submitted to and approved by the RWQCB. However, remediation activities on these parcels have been completed to a level sufficient to allow the safe development of commercial or industrial uses only, according to NASA's studies: conveyance of the land to the City of Downey included deed restrictions that limit development to only these general types of uses. Other uses are possible only if the City and/or the developer of such uses provides for remediation of the site to a sufficient level, according to appropriate regulatory standards, that development of such uses would not constitute a significant impact with respect to the exposure of persons to hazardous materials. Hospital and medical office uses are permitted under the industrial uses allowed by the deed restriction. However, the increased building heights on the project site due to Kaiser's proposal may require deeper excavation for foundations, which may reach depths at which groundwater could be encountered. The City, in order to exercise an appropriate level of caution, has required Kaiser to undertake additional investigations, and Kaiser may be required to implement further remediation, based on the recommendations of the most recent studies, in order to develop its portion of the project.

A site reconnaissance by Law/Crandall (2001) for Kaiser yielded observations of concrete patches marked with spray paint with the designation "ESV," followed by the respective building number and boring number. The locations thus appear to have been subsurface borings, but none of the locations correspond to the test locations in studies reviewed by Law/Crandall, and Law/Crandall is attempting to locate a report that summarizes the findings of those borings.

Current and Ongoing Remediation Activities

The RWQCB-LA has required additional characterization of groundwater beneath Parcel 2 to more fully assess the extent of the VOCs. Parcel 2 did not require remediation to reach the level of acceptable use described above for Parcels 3, 4, 5, and 6. Parcel 1, however, contains a soil vapor extraction (SVE) unit for the removal of PCE from the soil surrounding the sump at Building 244. This remediation work plan has been approved by, and is being executed under the supervision of, the Los Angeles RWQCB. Remediation efforts are expected to continue for up to 18 months to achieve acceptable safety levels for commercial and industrial uses; however, the RWQCB has indicated that construction may occur during the time that the SVE facility is in operation with no adverse effects. Under authority of the federal CERCLA statute, 42 USC 9620 (120(h)(3)), the U.S. Government obtained an "operating properly and successfully" determination for the soil remediation system from the U.S. EPA, and a letter from the RWQCB concurring with the transfer of Parcels 1 and 2 (Hickens 2001, pers. comm.).

3.3.3 Regulatory Framework

Regulatory Agencies

The following local, state, and federal requirements regulate the proper storage, management, and disposal of hazardous materials that would be routinely used by Kaiser on the project site.

The management of hazardous materials¹ is regulated by various federal, state, and local agencies. Federal and state agencies include the U.S. Environmental Protection Agency (U.S. EPA), U.S. Department of Transportation (DOT), California Environmental Protection Agency (CAL EPA), CAL EPA Division of Toxic Substances Control (DTSC), California State Water Resources Control Board (SWRCB), Regional Water Quality Control Board (RWQCB), South Coast Air Quality Management District (SCAQMD), and the California Highway Patrol. Local agencies include the Los Angeles County Health Department (LACHD) and the City of Downey Fire Department. Table 3.3-1 lists the

¹ California's hazardous materials laws define a hazardous material as:

...any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (California Health and Safety Code, §25,501).

federal, state, and local regulatory agencies that oversee hazardous materials handling and hazardous waste management, and the statutes and regulations they administer.

Medical waste management is regulated under the Medical Waste Management Act which is enforced locally by the LACHD. The Act regulates the generation, hauling, treatment, containment, and storage of medical waste.

Permits

Operating permits are required for the treatment of medical waste, the operation of underground and aboveground fuel storage tanks, treatment of hazardous waste, and toxic air emissions. The permits required for hospital operation related to hazardous materials include:

South Coast Air Quality Management District

- Operating permits for utility sources, i.e. boilers and generators.
- Operating permits for ethylene oxide sterilizers and abaters.

Environmental Protection Agency

- Hazardous Waste Generator Number
- Extremely Hazardous Waste Permits (DTSC)

Los Angeles County Health Department

- Biohazardous Waste Generator Registration
- Biohazardous Waste Treatment Permit
- Underground Storage Tanks Permits

**TABLE 3.3-1
SUMMARY OF HAZARDOUS MATERIALS REGULATIONS**

<u>Regulatory Agency</u>	<u>Applicable Codes and Regulations</u>
Dept. of Transportation	Hazardous Materials Transportation Act – Code of Federal Regulations (CFR) 49
Environmental Protection Agency	Federal Water Pollution Control Act Clean Air Act Resource Conservation & Recovery Act (RCRA) Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) Superfund Amendments & [WHAT] Act
Occupational Safety & Health Administration	Occupational Safety and Health Act & CFR 29
State Agencies	
Dept. of Toxic Substances Control	California Code of Regulations (CCR) Titles 17, 19, and 22
Dept. of Industrial Relations (CAL-OSHA)	California Occupational Safety & Health Act, CCR Title 8

TABLE 3.3-1
SUMMARY OF HAZARDOUS MATERIALS REGULATIONS

Regulatory Agency	Applicable Codes and Regulations
State Water Resources Control Board & Regional Water Quality Board	Porter-Cologne Water Quality Control Act Underground Storage Tank Law
Health & Welfare Agency	Safe Drinking Water & Toxic Enforcement Act
Air Resources Board & Air Pollution Control District	Air Resources Act
Office of Emergency Services	Hazardous Materials Release Response Plans/Inventory
	Law Acutely Hazardous Materials Law
Dept. of Fish & Game	Fish & Game Code
Dept. of Food & Agriculture	Food & Agriculture Code
State Fire Marshal	Uniform Fire Code, CCR Title 19
County of Los Angeles	
Los Angeles County Health Department	Hazardous Materials Management Plan Medical Waste Management Act Underground Storage Tank Ordinance
City of Downey	
City of Downey	Fire Code Toxic Gas Ordinance

Source: Davis J. Powers & Associates, Inc. November, 1993.

City of Downey General Plan Safety Element

The intent of the General Plan Safety Chapter is to “reduce loss of life, injuries, and damage to property resulting from natural and man-induced hazards.” The Chapter provides standards, policies, and programs to promote the safety of the community. However, no policies and programs in the Safety Chapter apply to the proposed project.

3.3.4 Thresholds Of Significance

The proposed project will have a significant impact if it would expose people or the environment to hazardous materials or substances, or to a significant health risk associated with the storage, use, transportation or disposal of hazardous waste on the site.

3.3.5 Impacts

Less Than Significant Impacts

Use, Transportation, Storage, and Disposal of Hazardous Materials for the Downey Landing, LLC Project

Implementation of the proposed Downey Landing, LLC project is not anticipated to involve the routine use, storage, transportation, or disposal of hazardous substances. Therefore, the potential risk associated with upset and the resulting release of hazardous substances into the environment is

considered very low, and would, therefore, be considered a less-than-significant impact for the Downey Landing, LLC portion of the project.

Potentially Significant Impacts

Implementation of the proposed project would result in the following potentially significant impacts related to hazards and hazardous materials.

Impact 3.3-1: Construction of the proposed project could expose workers to previously undetected pockets of contaminated soils.

During grading and excavation for the proposed project, previously undiscovered pockets of soils that contain significant levels of hazardous substances could be exposed, and could expose the workers to unacceptable levels of risk to their health. This would constitute a **potentially significant impact**. However, the conveyance agreements currently being formulated by the City, NASA, State Lands Commission, and the Federal General Services Administration will include measures for the evaluation and, if necessary, remediation of any contaminated soils that may be exposed during grading and excavation activities on the project site. Because these measures have not yet reached their final form, Mitigation Measures 3.3-1 and 3.3-2 are proposed, and their implementation would reduce this potential impact to a less-than-significant level.

Impact 3.3-2: Demolition and/or renovation of existing structures on the project site could expose workers and the environment to asbestos-containing materials (ACM).

As described above in Section 3.3.2, an asbestos survey conducted by NASA in 1986 identified 25 existing structures on the project site that contain ACM, including Buildings 1, 11, 14, 39, 288, and 6/290, which are proposed for reuse under Option 1 for the Downey Landing, LLC portion of the project. Demolition or modification of all or portions of the 25 structures identified could result in the release of fibers into the air, where they could be inhaled directly, or become impregnated in clothing and equipment, resulting in potential secondary exposure to construction workers and other individuals. Either method of exposure could subject people associated with both the Downey Landing, LLC and Kaiser projects to an unacceptable health risk associated with the release of ACM. This would constitute a **potentially significant impact**. However, implementation of Mitigation Measure 3.3-1 would reduce this potential impact to a less-than-significant level.

Impact 3.3-3: Demolition and/or renovation of existing structures on the project site could expose workers and the environment to lead-based paint waste and residues.

As described above in Section 3.3.2, the majority of the structures on the project site were constructed prior to 1978, and may therefore contain lead-based paint. Demolition or modification of all or portions of the existing structures on-site could result in the spread of airborne lead particles or other contaminated debris, which would result in an increased exposure of construction workers and possibly other individuals to lead. This would constitute a **potentially significant impact**. However, implementation of Mitigation Measure 3.3-1 would reduce this potential impact to a less-than-significant level.

Impact 3.3-4: Construction of the proposed Kaiser project could expose individuals to an increased health risk associated with exposure to contaminated soils.

As described above in Section 3.3.2, potential soil contaminants may be present on Parcel 5, where the Kaiser project is proposed to be constructed, as a result of the use, storage, and disposal of hazardous materials by previous uses. The Phase I ESA prepared by Law/Crandall (2001, p. 33) concluded that, based on the findings of the assessment, further investigation may be warranted to assess the potential for impacted soil and groundwater on Parcel 5 in the specific locations at which evidence of contamination was observed. Based on this assessment, the potential for impacted soil and groundwater must be considered a potentially significant risk to human health during construction activities, and therefore, a **potentially significant impact**. However, implementation of Mitigation Measure 3.3-3 would reduce this impact to a less-than-significant level.

Impact 3.3-5: Operation of the proposed Kaiser project could expose individuals to an increased health risk associated with the use, storage, transportation, and disposal of hazardous substances

The proposed Kaiser Bellflower Replacement Medical Center will use and store a variety of hazardous materials which will produce hazardous wastes on the Project site. In comparison to many industrial facilities, however, the proposed Kaiser facility will generate relatively small quantities of hazardous waste, which will be handled and disposed of in accordance with Kaiser's internal policies and procedures and state and federal law.

Hazardous materials pose a risk to worker and public health whenever these substances are used or stored. The risk to human health and the environment posed by hazardous materials is determined by the probability of exposure and the potential severity of harm resulting from such exposure, measured against the beneficial value from the particular use. Potential exposure of the public or the environment to hazardous materials could result from the Project from the following activities: (1) the improper handling or use of hazardous materials during hospital operations, (2) failure of storage containment systems, (3) improper disposal methods, (4) transportation accidents, and (5) fire, explosion or other emergencies.

The types and varieties of hazardous waste Kaiser produces are significant enough to require compliance with hazardous waste regulations, some of which are listed below.

Basic compliance requirements for hazardous waste generators include:

- Responsibility to characterize wastes
- Obtaining an EPA identification number
- Managing hazardous waste on-site in compliance with the DTSC regulations
- Obtaining hazardous waste treatment permits as necessary
- Selecting appropriate off-site treatment and disposal facilities
- Preparing hazardous wastes for shipment
- Making reasonable efforts to minimize waste generation
- Conducting an annual chemical inventory under federal and State requirements

Hazardous materials will be utilized in the following departments at the proposed Kaiser facility:

Central Supply

The Central Supply department would provide for sterilization of medical instruments and equipment, using a highly toxic gas, ethylene oxide (Eto). The Eto units in the proposed hospital would be enclosed in a specialized room away from the main corridors and patient rooms, and equipped with sensors to detect any escape of Eto into the work room. The Eto units would

release the spent gas into vents which are equipped with chemical scrubbers that reduce the concentration of Eto to non-toxic levels. Eto is a strictly regulated gas, controlled by the State and local air quality management districts. The state requires that facilities utilizing 25-600 pounds per year of Eto maintain a 99% emission control rate. For facilities using greater than 600 lbs per year, an emission control of 99.9 % must be maintained.

Laboratories

The hospital laboratory would use certain hazardous materials. These materials include alcohols, xylenes, formaldehydes, stains and reagents. Acids are also used in the lab, including nitric acid, hydrochloric acid and glacial acetic acid. Bases also include sodium hydroxide and ammonium hydroxide. These materials are generally stored in small quantities, according to legal regulations.

Central Plant, Engineering

The Central Plant would contain one or more underground tanks to store diesel fuel. These underground tanks would be monitored by a detection system to indicate any leakage. In addition, other flammable, combustible and volatile materials would be used to operate and maintain engineering equipment throughout the hospital, and for facilities such as fuel-driven generators, oil-containing electrical transformers, cooling tower treatment chemicals, and potable and distilled water treatment systems.

Other Departments

Hazardous materials include formaldehyde, flammable liquids, paints, solvents, pesticides and detergents which would be in other departments. Photographic developer and fixer would also be used in radiology and ophthalmology for developing X-rays and other film. The used photographic developer would be recycled for silver content by Kaiser.

Kaiser Procedures Regarding Hazardous Waste

Kaiser Permanente has developed many internal procedures to minimize waste, prevent pollution, and conserve natural resources, governed by Kaiser's national Environmental Stewardship Council. In California, Kaiser's operations leaders sponsor efforts to minimize solid, bio-hazardous, and chemical wastes. The average performance for reducing bio-hazardous (regulated medical) waste for KP medical centers is 30%, a significant

reduction in the volume and toxicity of waste streams. Chemical wastes are minimized through programs to centralize and standardize the use of hazardous chemicals, to use less hazardous alternatives when appropriate, to recycle chemical wastes such as xylene and alcohol when possible, and to dispose of wastes in an environmentally responsible manner. Kaiser attempts to reduce, reuse, and recycle all waste streams wherever feasible, limiting significant impacts on the public and the environment, and minimize off-specification/expired shelf-life chemicals and pharmaceutical hazardous wastes with "just-in-time" programs through cooperative efforts with vendors to return short shelf-life items.

Kaiser Permanente employees responsible for the handling of hazardous wastes are trained in accordance with the standards set forth in the *Kaiser Permanente California Hazardous Waste Guidance Manual*, which is hereby incorporated by reference in its entirety, and which is attached to the Human Health Risk Assessment prepared by Kaiser. This guidance document is designed to help Kaiser Permanente employees who are involved in the management of hazardous waste understand and comply with California hazardous waste requirements relevant to the positions in which they are employed. Sample forms, procedures, and plans are included in the Guidance Manual.

Kaiser Permanente also has an aggressive audit program. Kaiser's National Environmental, Health and Safety (NEH&S) Audit Program is a governance tool used to assess and communicate environmental, health and safety compliance status with the ultimate purposes of assuring management that Kaiser's waste management and treatment program maximizes the impact on its employee, members, the public and the environment. The audit program will evaluate the compliance programs and the environmental health and safety management systems of the proposed Kaiser facility.

The Hazardous Waste audit protocol will evaluate the Kaiser facility's program for completeness with the current regulatory and environmental compliance obligations. Topics audited in the Hazardous Waste program include an evaluation of program management procedures, employee training and knowledge, records retention, waste storage area management and security, waste classification, waste handling, waste containerization and labeling, transporter and disposal site selection and management and waste activities reporting.

The Medical Waste audit protocol evaluates the Kaiser facility's program for proper management of infectious, biohazardous and chemotherapy drug related wastes. The audit protocol evaluates proper usage of solid waste and medical wastes ("red bag") containers, proper disposal of trace and bulk quantities of chemotherapy wastes and employee knowledge.

The audit scope is standardized, which allows for all audits to be conducted in a consistent manner and the audit results are quantified to allow for benchmarking. The audit results are reported annually to the Kaiser Permanente Board of Directors.

Although the use of hazardous materials and the disposal of hazardous waste at the project site represents a **potentially significant impact**, the impact would be reduced to a less than significant level by the implementation of Kaiser's standard internal procedures, as documented in the Hazardous Materials Business Plan adopted by Kaiser, as well as by conformance with existing Federal, State and local requirements regulating hazardous materials and waste on the project site.

Significant, Unavoidable Impacts

The proposed project would not result in any significant, unavoidable impacts related to hazards or hazardous materials.

3.3.6 Cumulative Impacts

For the purposes of this analysis, cumulative impacts are evaluated on a City-wide level, since exposure of contaminated soils or the potential localized release of asbestos or lead-based paint waste are likely to remain contained.

Construction activities associated with the proposed project could expose workers to lead-based paint, ACM, and undetected pockets of contaminated soils; however, as described above in Section 3.3.5, Mitigation Measures 3.3-1 and 3.3-2 require compliance with applicable procedures to minimize exposure to and release of these materials. Because the possible risks associated with construction activities would be minimized (i.e., reduced to a less-than-significant level), the project's contribution to risks associated with the construction-related release of or exposure to hazardous materials would not be cumulatively considerable, and this cumulative impact would be less than significant.

The proposed Kaiser project would routinely use and transport hazardous substances and would generate chemical and biological waste. However, as described above in Section 3.3.3, the Kaiser

facility would be regulated by federal, State, and local agencies, and would be required to comply with all applicable provisions of the statutes and regulations listed in Table 3.3-1. Additionally, as described in Section 3.3.5, Mitigation Measure 3.3-1 would reduce risks associated with operation activities to less-than-significant levels. Therefore, despite the site of the project, the project's contribution to an increased risk of construction-related and operational hazards would not be cumulatively considerable, and would therefore be less than significant.

3.3.7 Mitigation

The following mitigation measures have been proposed to avoid or lessen, to the extent feasible, the significant impacts identified above in Sections 3.3.5.

Mitigation Measure 3.3-1: Compliance with applicable plans and policies.

The Applicant and the City shall comply with all applicable Federal, State and local plans and policies regarding hazardous substances use, transportation, and disposal, as well as contaminant remediation, including, but not limited to the applicable provisions of the Toxic Substances Control Act (TSCA), the Asbestos Hazard Emergency Response Act (AHERA), the California Health and Safety Code, the California Hazardous Waste Control Law, and other applicable provisions of the California Code of Regulations (CCR), as well as applicable regulations promulgated by the U.S. and California Occupational Safety and Health Administrations (OSHA) and Environmental Protection Agency (EPA).

Mitigation Measure 3.3-2: Formulation of a procedure to be implemented in the event of discovery of previously unknown pockets of contaminated soils.

Prior to issuance of a grading permit, the City of Downey shall, in consultation with and with the approval of the RWQCB, formulate a plan to be implemented in the event that grading or excavation activities during construction expose potentially contaminated soils (e.g., soils that exhibit staining or odors). At a minimum, the plan shall identify the RWQCB as a responsible agency, and shall include the following specific points:

- A qualified construction monitor shall be designated and shall be present on-site during grading and excavation activity.

- The construction monitor shall be responsible for identifying pockets of potentially contaminated soils, and, upon identification of potential contaminants, for implementing the procedures outlined in the plan.
- All work in the vicinity of the affected area shall cease.
- The Los Angeles RWQCB shall be contacted.
- The appropriate California Health and Safety Code procedures shall be followed.

The plan shall also identify a procedure for sampling, testing, and remediation, as appropriate, of contaminated soils, and for obtaining the concurrence of and necessary clearance from the RWQCB, before construction activities can resume. The plan shall also provide for the preventative procedures for the protection of construction workers during work in areas where contaminated soils have previously been discovered.

Mitigation Measure 3.3-3: Preparation of a Phase II Environmental Site Assessment for the Proposed Kaiser project site.

Prior to issuance of a grading permit, Kaiser shall retain a qualified consultant to prepare a Phase II Environmental Site Assessment (ESA), for review and approval by the City Planning Department or its qualified designee, and shall demonstrate, to the City's satisfaction, that Kaiser has implemented all applicable recommendations of the Phase II ESA.

3.4 Hydrology and Water Quality

3.4.1 Introduction

The purpose of this section is to describe the drainage impacts of the proposed projects. Information for site drainage conditions, runoff quantities, and hydrologic design are taken from the "Hydrology Report" prepared by MCE Consultants, dated April 19, 2001, found in Appendix F.

3.4.2 Existing Conditions

General Characteristics

The project site, known as the Rockwell/Boeing NASA property, is approximately 160 acres in area. The topography is very flat, having less than a 0.5 percent slope from the north end of the site at Stewart & Gray Road to the south end at Imperial Highway. The site contains several existing buildings associated with the previous use by Rockwell and Boeing, including a 913,023 square foot building. The remainder of the site is paved with asphalt or concrete, and for a relatively minor portion of landscape.

Surface Drainage Characteristics

Area Wide Drainage

The project site is located within the Los Angeles-San Gabriel Hydrologic Unit as defined by the California Regional Water Quality Control Board, Los Angeles Region (4), and is tributary to the San Gabriel River. Generally, on-site storm runoff follows site topography southerly and westerly. The project site is drained by an existing system of underground storm drains that collect the onsite runoff and carry it southward either through the site or westerly to Lakewood and Clark then southerly into Imperial Highway. From Imperial Highway the existing storm drain system converges and continues southerly along Ardis Avenue, eventually entering the San Gabriel River.

The Water Quality Control Plan for the Los Angeles Region (4) addresses water quality objectives for both surface and groundwater. The surface water sources in and around the project site are minor and are not identified in the Basin Plan for specific water quality objectives or for beneficial uses. Water quality discharge requirements meeting area wide surface water use objectives are established as permit requirements by the RWQCB and the SUSMP during permitting for construction and operations of proposed development projects.

Site Drainage Patterns

For the purpose of the hydrology analysis, the existing watershed has been analyzed using the available information provided by the City of Downey. This information includes on-site storm drain facilities including piping size and location, off-site storm drain facilities indicating piping size and location, and the Site Plan for the Storm Water Pollution Prevention Plan (SWPPP), illustrating the watershed boundaries and collection points. The on-site topography for the project has also been provided by the City with limited contour information (at 2-foot intervals). The runoff paths and slopes, storm drain slopes, collection points and sub-areas of the watershed are estimated from this information.

Utilizing this information, the subject site is divided into 8 watershed sub-areas, lettered A through H, separated according to the point at which the storm water runoff exits the site. The Hydrology Map (Existing Conditions) in Appendix F, Hydrology Report, shows the general topography of the site as well as these drainage sub-areas.

Sub-area A drains the most northeastern portion of the site and is tributary to an existing storm drain lateral from Bellflower Boulevard. This paved area includes approximately 9.7 acres.

Sub-area B includes a portion of the site that is just southerly of Sub-area A. This paved sub-area also drains to Bellflower via an existing onsite storm drain lateral and is approximately 3.2 acres in area.

Sub-area C includes the most northwesterly portion of the site and is tributary to the storm drain in Lakewood Boulevard. This area contains 27.6 acres of small and large buildings, paving, and a small portion of landscape area next to Lakewood.

Sub-area D is the largest sub-area of the site and contains the middle and southerly portion of the site. The total area is 59.1 acres, incorporating almost 45% of the total runoff area. This sub-area drains southerly to Imperial Highway via an existing on-site storm drain system that collects the surface runoff through a series of collection inlets. This area consists mostly of buildings and paving, with a small percentage of area landscaped.

Sub-area E includes approximately 21.7 acres along the westerly middle portion of the site and drains to Clark Avenue via an existing onsite storm drain lateral. Sub-areas F and G contain approximately 6.0 acres and also drain to Clark Avenue via existing onsite storm drain laterals. Sub-areas E, F and G are also mostly paved, with few buildings.

Sub-area H is the most southwesterly portion of the site. This area drains to Imperial Highway where the runoff is collected into the existing storm drain line in Imperial. This area contains 7.1 acres of mostly pavement.

Regional Flooding

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), the project is located in a special study area. On May 24, 2001, FEMA changed the site's flood zone designation to X, which distinguishes this area as either of the following:

- An area of 500-year flood; an area of 100-year flood with average depths of less than one foot; and an area protected by levees from 100-year flood; or
- An area determined to be outside the 500-year flood plain.

This change was confirmed by FEMA on January 11, 2002. It has been determined that the project site lies within the 500-year flood plain (Brian Ragland, Downey Public Works, July 2001).

Surface Water Quality

Surface water quality in urban areas is affected by various point- and non-point-source pollutants. Point-source pollutants are those emitted at a specific point, such as a pipe, while non-point source pollutants are typically generated by less confined sources, such as streets, building sites or agricultural areas. The drainage facilities within the City of Downey receive runoff from a variety of non-point sources. As a general rule, point-source pollutants are more easily monitored; thus, pollutant discharge standards are more easily enforced, while non-point-source pollutants, such as those found in runoff, are more difficult to identify. Even though non-point-source pollutants are difficult to monitor, they are important contributors to surface water quality, especially in urban areas.

Constituents of runoff water, and their concentrations, vary with surrounding land uses, topography and amount of impervious cover, as well as intensity and frequency of irrigation or rainfall. Runoff may typically contain oil, grease, and metals accumulated on streets, as well as pesticides, herbicides, particulate matter, nutrients, animal wastes and other oxygen-demanding substances from landscaped and agricultural areas. Concentrations of pollutants in runoff generated during the dry season by landscape irrigation and street washing (dry-weather runoff) are typically lower than concentrations found in wet-weather runoff (runoff generated by precipitation during the wet season). The highest pollutant concentrations are found in stormwater runoff generated at the beginning of the wet season, during the so-called "first-flush". Approximately 90 percent of total accumulated pollutants are removed within the first 0.5 inch of rainfall, with street surfaces as the primary source of pollution in urban areas (EPA, 1999).

Groundwater

According to the Initial Study for this project, approximately 90% of the City of Downey's water supply is pumped from the Central Groundwater Basin. These groundwater levels are maintained

by the Water Replenishment District of Southern California. The remainder of the water supply for the City is purchased from the Metropolitan Water District (MWD).

3.4.3 Regulatory Framework

There are no policies with the City's General Plan that directly address hydrology.

3.4.4 Thresholds of Significance

For purposes of the following impact analysis, the proposed project may be deemed to have significant impacts associated with hydrology or water quality if it will:

- Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems.
- Cause or expose people and property to substantial flooding, erosion, or siltation.
- Substantially degrade surface water quality.
- Cause substantial interference with groundwater recharge or direction and rate of groundwater flow or causes substantial deterioration of groundwater quality.

3.4.5 Impacts

Note that an updated site plan was produced for the project area on February 8, 2002. Since the total acreage and buildable area under the new scenarios remain the same as the August 2, 2001 site plan, the impact to surface drainage would remain the same.

Impact on Drainage Patterns

The proposed project will demolish most of the existing buildings and paved areas of the site, and construct new buildings, parking lots, and landscape islands. Implementation of the project would alter the existing drainage patterns plus the rate and amount of surface runoff generated from the site. The proposed site drainage patterns affect the area that is tributary to the existing storm drain system in Imperial Highway and Bellflower Boulevard. The runoff from the proposed development will be collected by a system of catch basins, gutters, and drains, discharging off-site to the existing off-site storm drain system.

The proposed development is modeled largely in parallel with the existing system. The general watershed areas and collection points or exit points from the site for a proposed condition model the existing condition. It is anticipated that the proposed development will construct new on-site storm drain facilities rather than try to utilize any existing on-site facilities.

The proposed development should generally follow the existing site's drainage scheme of capturing the runoff at several locations discharging to an on-site storm drain and connecting to the existing

storm drain system in the surrounding streets. The locations of the existing and proposed storm drains are shown on Figures 3.4-1 and 3.4-2.

Impact of Phasing the Development

As previously discussed, the site drainage is collected within several distinctive sub-areas. Because the proposed drainage patterns are expected to generally follow the existing drainage patterns, phasing for the development of the project should not adversely affect the drainage patterns of the existing site, provided that the proposed and existing drainage sub-areas remain compatible and any new construction's storm runoff is contained wholly within its limits and is directed offsite by its own storm drain system. Likewise, any new construction should make provisions that it does not interfere with any existing storm drain system required to drain existing areas left in place. If, for instance, the northerly portion of the project was developed first, this should affect portions of existing sub-areas A, B and C only. Existing sub-areas D through G should effectively continue to drain the existing property since they have their own storm drain system.

Comparison of Existing and Proposed Flows

A 25-year hydrology analysis was completed for the site for an existing condition and proposed condition. The existing and proposed conditions were analyzed in order to document the changes in the storm water runoff that the proposed development will incur on the site. A summary of the hydrologic analysis is included in Table 3.4-1.

The Hydrology analysis indicates the total flow contributing to the existing storm drain along Bellflower Boulevard will increase approximately 4.4 cfs (30.6 cfs to 35 cfs). This increase can be attributed to the increase in area for sub-area B of approximately 4.9 acres. The total flow contributing to the existing storm drain along Ardis Avenue, downstream of Imperial Highway and the project site, will increase approximately 15 cfs (248 cfs to 263 cfs).

Less Than Significant Impacts

Regional Flooding Impacts/Erosion or Siltation

Project improvements will not alter the regional flooding potential of the area. As previously stated, this project is located in a special study area, FEMA flood zone designation X. The hydrology analysis shows that storm water flows can be effectively conveyed to existing storm water facilities. Consequently, the proposed project will not result in the exposure of people or property to regional flooding.

The proposed project will consist of a highly impermeable site with proposed buildings and parking lots covering most of the site. Since the project will consist of a predominately impervious surface, as per the existing condition, no changes are expected to result in erosion or siltation on- or off-site.

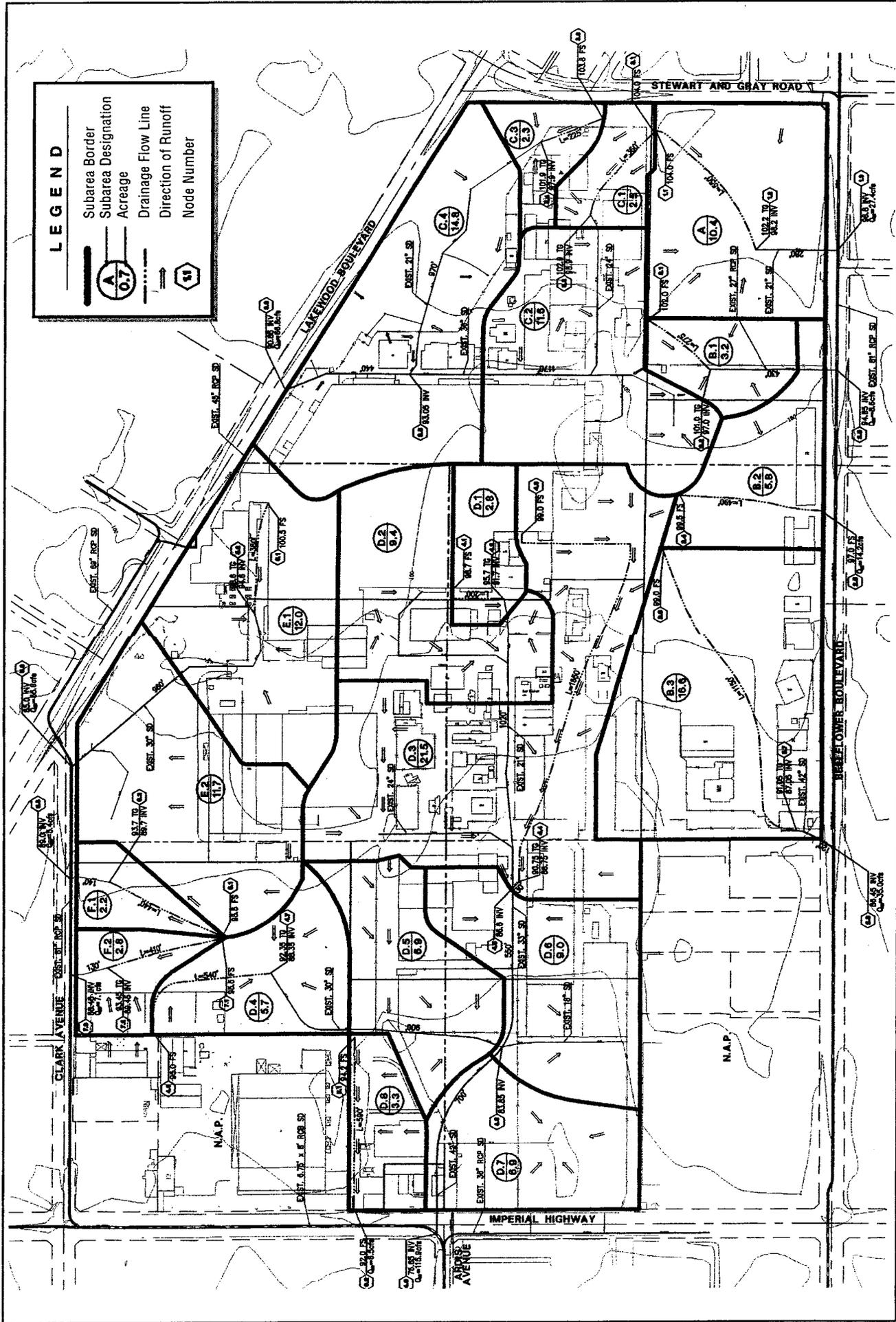


FIGURE 3.4-1
Existing Hydrology
 City of Downey



10552-00

0 120 240 480 Scale in Feet
 SOURCE: MCE Consultants

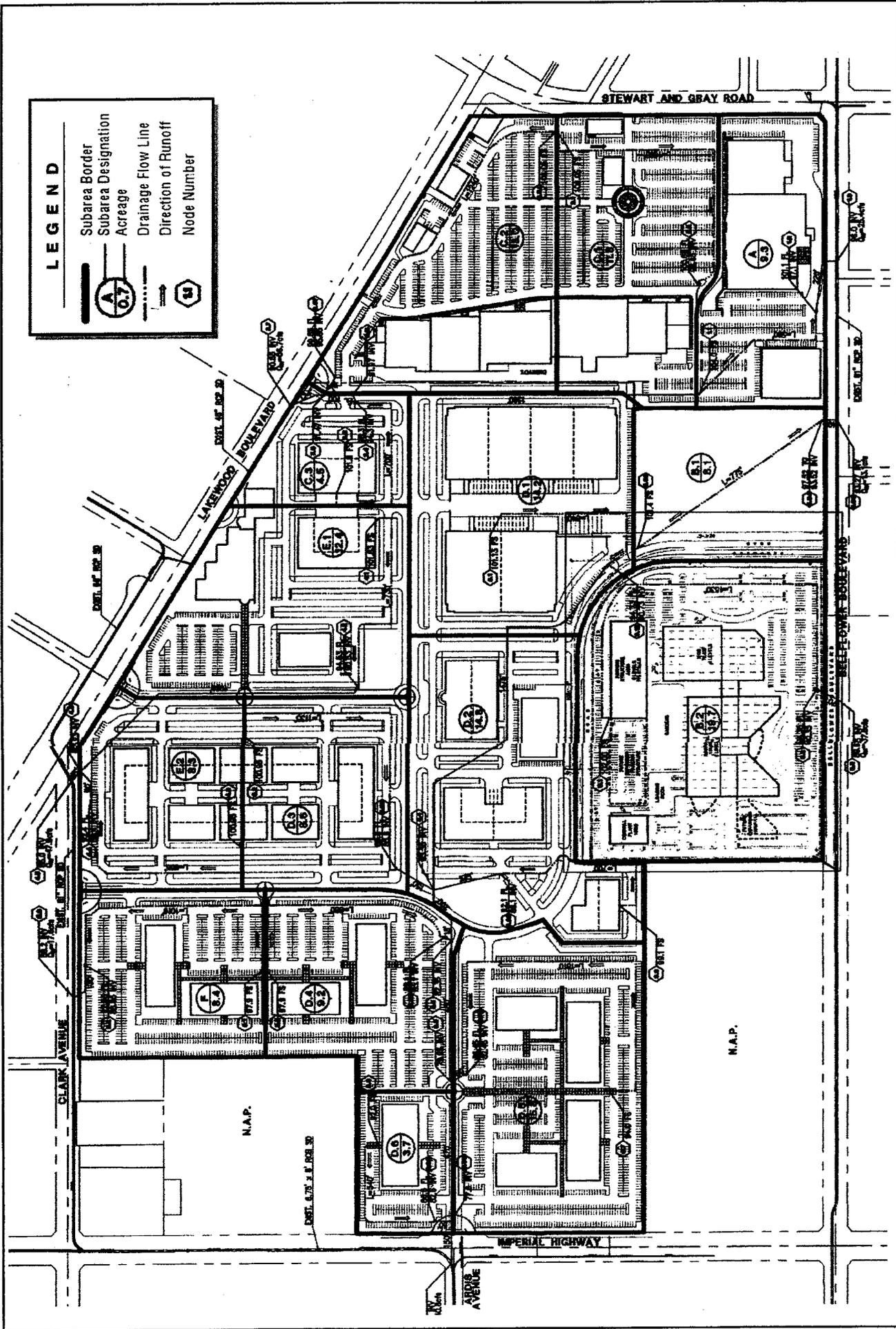


FIGURE 3.4-2
Proposed Hydrology, August 2, 2001 Site Plan
 City of Downey



10552-00

Groundwater Impacts

The prior use (i.e., NASA-Boeing) contributed an insignificant amount to groundwater recharge due to the very high percentage of impermeable surface. Consequently, the proposed project, since it will substantially duplicate the percentage of impermeable surfaces, will have a less than significant impact relative to groundwater recharge.

Potentially Significant Impacts

Surface Drainage

Impact 3.4-1: The calculated increase in runoff for the entire site due to construction of the project is approximately 20.2 cfs (278.0 cfs to 298.2 cfs), which is about 7.5% (see Table 3.4-1 below). Most of this increase can be attributed to the increase in impervious surfaces from the existing site of approximately 8 acres (134 acres to 142 acres), or an increase of almost 6%.

TABLE 3.4-1
SUMMARY OF EXISTING AND PROPOSED HYDROLOGY

Destination of Flows	Existing	Proposed	Difference
Q exiting site @ exist. Storm drain in Bellflower (sub-areas A + B)	30.6 cfs	35.0 cfs	+ 4.4 cfs
Q exiting site @ exist. Storm drain in Lakewood (sub-area C)	57.7 cfs	56.7 cfs	- 1.0 cfs
Q exiting site @ exist. Storm drain in Imperial (sub-areas D + H)	123.8 cfs	141.0 cfs (Sub-area D only)	+ 17.2 cfs
Q exiting site @ exist. Storm drain in N'ly Clark (sub-area E)	50.8 cfs	47.9 cfs	- 2.9 cfs
Q exiting site @ exist. Storm drain in S'ly Clark (sub-areas F + G)	15.1 cfs	17.6 cfs (Sub-area F only)	+ 2.5 cfs
Q total (all sub-areas)	278.0 cfs	298.2 cfs	+20.2 cfs

Source: MCE Consultants, Hydrology Report, dated April 19, 2001.

The City of Downey does not have a Master Plan of Drainage of the City. The estimated additional 20.2 cfs generated by the cannot, therefore, be analyzed against the existing flows carried by the existing storm drain system to determine their capability to carry the additional runoff without a significant engineering effort.

Any increase in runoff may have the potential to result in localized adverse flooding impact. This potential impact can be mitigated by installation of on-site retention basins or percolation basins to reduce on-site discharge to the previous conditions. Furthermore, analysis of the actual proposed storm drain system, when designed, may show little, if any additional runoff, resulting from a more detailed analysis.

The proposed project should not expose people or property downstream to substantial flooding. The impact can be mitigated with the proposed drainage improvements.

With implementation of Mitigation Measures 3.4-1 and 3.4-4, Impact 3.4-1 to surface water drainage will be reduced to a less than significant level.

Surface Water Quality Impacts

Impact 3.4-2: Grading and construction activities on the project site have the potential to result in short-term adverse water quality impacts. These activities may increase erosion and contribute sediment to surface waters. Additionally, improper handling of construction materials and/or equipment may result in accidental spills that could adversely affect water quality.

When the project is rough graded, the potential for mud and discharge from the site will substantially increase during a rainstorm. This amount of silt can be calculated based on potential sediment yield, acreage, and slope. Desilting basins can be sized to retain this sediment and detailed on the erosion control plan as part of the grading permit. The contractor should install these facilities during rough grade of the site. Phasing of the project can also lessen the effect of construction-related discharge from the site by allowing for substantially less disturbed area to be exposed to storm runoff.

Since the proposed project will involve the disturbance of five or more acres, it will be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity. Under this permit, the developer will be required to eliminate or reduce non-storm water discharges and to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must emphasize Best Management Practices (BMPs) to identify and reduce sediment and other pollutants in storm water discharges, both during and after construction. The Developer will retain a Civil Engineer or Environmental Engineer to select applicable BMPs and compile the SWPPP based on final site characteristics, runoff potential, and project design needs. Typical measures that have been proven feasible and are commonly required are listed as Mitigation Measures 3.4-2 and 3.4-3. These measures will reduce Impact 3.4-2 to a less than significant level.

Long-term Impacts

Impact 3.4-3:

The proposed project has the potential to result in long-term adverse impacts to water quality due to the addition of pollutants typical of urban runoff. Additional automobile traffic generated from the proposed use of the site, as compared to the current use, could result in an increased incremental concentration of urban contaminants in storm runoff.

There are no numerical water quality standards that apply to storm water or "non-point source" pollution. That is, current federal and state standards apply to "point source pollution." However, the impacts of urban runoff are now well understood and federal municipal storm water regulations require that pollutants in storm water be reduced to the maximum extent practicable. Also, to be in compliance with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity, the Los Angeles County Department of Public Works (LACDPW) has adopted their own Development Planning Model Program in the form of the Standard Urban Stormwater Mitigation Plan (SUSMP). Among other requirements, the SUSMP requires that development projects, including those greater than 100,000 sq. ft. in commercial space or parking lots greater than 5,000 sq. ft., both criteria met by the proposed project, implement measures that:

- Effectively prohibit non-storm water discharges,
- Reduce the discharge of pollutants from storm water conveyance systems to the Maximum Extent Practicable.

As part of the reduction of pollutants, the SUSMP requires the treatment or infiltration of storm water runoff based upon volume. This may be accomplished by implementing structural treatment control BMPs specific to the kinds of pollutants that may occur with the development. Implementing effective BMPs would mitigate water quality impacts from storm water runoff during construction and post-construction.

The City of Downey has requirements for the treatment of the storm runoff per the SUSMP. These requirements will include providing treatment and collection of the volume of runoff produced from a 0.75-inch storm event over the entire site, prior to its discharge to the off-site storm water system, and controlling the peak flow discharge from the site. To accomplish these requirements, solutions could include detention basins with infiltration or "storm 'ceptors" (filtering devices). The City will also require a CDS

(proprietary manufacturer) unit to treat floating debris prior to discharge of runoff offsite. Catch basin inserts are not allowed in the City of Downey.

With implementation of Mitigation Measures 3.4-2 and 3.4-3, Impact 3.4-3 associated with long-term deterioration of surface water quality will be reduced to a less than significant level.

3.4.6 Cumulative Impacts

The scope of the cumulative analysis for the drainage impacts is limited at this point to site specific impacts and the ability of the project to mitigate these impacts. As discussed earlier, the City's Water Master Plan is not available at this time. However, the project's impact upon the City's water system and demand will be mitigated to a less than significant level by Mitigation Measure 3.4-1.

The scope of the cumulative analysis for water quality impacts is governed by the SUSMPS adopted by City ordinance. The project's contribution to water quality impacts can be mitigated to a less than significant level. Therefore, water quality impacts from a cumulative perspective can also be mitigated to a less than significant level.

3.4.7 Mitigation

Mitigation measures below provide typical requirements to be implemented and included in the construction and post-construction portions of the SWPPP and SUSMP.

Mitigation Measure 3.4-1: Prior to issuance of a grading permit, a final grading plan, final drainage plan, and final hydrologic/hydraulic analysis shall be submitted to the City of Downey for review and approval. Final design of the project storm drain system shall be consistent with the recommendations of the final hydrologic/hydraulic analysis and in conformance with the requirements of the City of Downey.

Mitigation Measure 3.4-2: Prior to the issuance of grading permits for each phase, the applicant shall submit and obtain approval of construction drainage and erosion control plans for each phase of grading. The control measures contained in the plan shall be approved by the City of Downey prior to any construction activities. The plans shall serve as the basis for the construction portion of the SWPPP and shall include the applicable measures such as the following:

- Diversion of offsite runoff away from the construction site;
- Prompt revegetation of proposed landscaped areas;
- Perimeter sandbagging or temporary basins to trap sediment;

- Regular sprinkling of exposed soils during construction phases;
- Installation of a minor retention basin(s) to alleviate discharge of increase flows;
- Specifications for construction waste handling and disposal; and,
- Erosion control measures maintained throughout the construction period.

Mitigation Measure 3.4-3:

Prior to the issuance of a grading permit, the project applicants shall file a Notice of Intent (NOI) with the State and comply with the requirements of the NPDES General Construction Permit, including the preparation of a SWPPP and a SUSMP incorporating BMPs for construction and post-construction control of runoff. The SWPPP and SUSMP shall be prepared by a Civil or Environmental Engineer for review and approval by the City of Downey. The plans shall reduce the discharge of pollutants to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and such other provisions that are appropriate. The plans shall include applicable post-construction measures such as the following:

- Control of impervious area runoff, including installation of detention basins, retention areas, filtering devices, energy dissipaters, pervious drainage systems, porous pavement alternatives;
- Implement regular sweeping of impervious surfaces such as parking lots and entry drives;
- Use of efficient irrigation practices;
- Provision of infiltration trenches and basins;
- Linings for urban runoff conveyance channels;
- Vegetated swales and strips;
- Protection of slopes and channels;
- Landscape design such as xeriscape or other design minimizing use of fertilizers;
- Minimize storm water runoff through site design; and,
- Minimize outdoor storage, including trash container areas.

Mitigation Measure 3.4-4: Prior to the issuance of building permits for the project, the project applicants shall implement conditions of the City of Downey regarding storm drainage improvements that shall include, but not be limited to:

- Construct the necessary storm drainage improvements (including detention basins if needed) to handle increased flows and provide BMPs.

3.5 Land Use and Planning

3.5.1 Introduction

This section provides information on the existing land use characteristics of the project site and adjacent areas. The Land Use section of the Initial Study (Appendix A) determined that the proposed project would result in less than significant land use impacts. The proposed project would not physically divide an established community, nor would it conflict with any applicable habitat conservation plan or natural community conservation plan. This section of the EIR will focus on conformity between the specific plan and development agreements, and the goals and policies of the Mixed Use Land Use category in the General Plan, as well as the project's consistency with other applicable plans and policies.

3.5.2 Existing Conditions

The City of Downey, which is in southeastern Los Angeles County, is an urbanized community located about 12 miles southeast of downtown Los Angeles. The project site is located at 12214 Lakewood Boulevard, in the southeastern portion of the City, and lies approximately 1 ¼ miles west of the San Gabriel River Freeway (I-605), about 2 ½ miles south of the Santa Ana Freeway (I-5), about ¼ mile north of the Glenn Anderson Freeway and Transit Way (I-105), and about 5 miles from the Long Beach Freeway (I-710). The San Gabriel River flows within ¾ mile of the site to the east. As illustrated in Figure 2-1, 2-2A, and 2-2B, Lakewood Boulevard and Clark Avenue border the project site on the west, Imperial Highway provides the southern border, Stewart & Gray Road lies to the north, and Bellflower Boulevard provides the eastern boundary.

The project site contains temporarily occupied structures and vacant land. Existing, on-site land uses comprise:

- Vacant NASA buildings (though Building 1, 9, 11, 288 and 290 are used occasionally for motion picture production);
- Vacant, undeveloped lots; and
- Vacant parking uses.

The site contains some 124 buildings, structures, and other built features (Earth Tech 1999, 4-1). Building 1 is the most prominent of these, and encompasses about 913,023 sq. ft.. Due to its size and configuration, Building 1 is sometimes used for motion picture production, as are Buildings 9, 11, 14, 39, 288, and 290.

The entire project site is designated in the General Plan Land Use Diagram as Mixed Use, which allows a combination of commercial/manufacturing uses. The zoning designation for the project site is General Manufacturing (M2), with Parking Buffer (P-B) on the perimeter of the site along Clark Avenue, Imperial Highway, and Stewart & Gray Road.

The project site has been in substantially continuous use since construction of the initial facilities in 1929. The use of the site evolved over its lifetime, and included aircraft manufacturing and assembly; testing and operation of the first low-level nuclear reactor in California; invention, testing and patenting of a chemical milling processes; research, production and assembly of early American rockets and missiles; design, production, assembly, and testing of equipment associated with space and moon landing programs; and design, development, manufacturing, assembly and support for the Space Shuttle program. Ownership of the facilities on-site has shifted from Vultee to Consolidated to North American to USAF and to NASA. North American Aviation operated the plant for USAF, while North American Rockwell and later Boeing operated the plant during NASA ownership. In 1998, as a result of restructuring within Boeing North American, the NASA industrial plant was determined to be "excess to the company's needs," and was, therefore, also considered to be excess to the government's needs and available for disposal by Spring 2001 (NASA 2000). Through the General Services Administration (GSA), the City of Downey arranged, and purchased parcels 3, 4, 5 and 6 from NASA. Conveyance of parcels 1 and 2 to the City from the State Lands Commission is anticipated to occur in Spring or Summer 2002. The City entered into a negotiation process with Downey Landing, LLC to develop the site, and the proposed Specific Plan evaluated in this EIR is being prepared to guide development of the site into a mixed-use project, with commercial, technology and business park, hospital, and medical office uses.

3.5.2 Regulatory Framework

City of Downey General Plan Land Use Element

The Land Use Chapter is often perceived as the most representative portion of a General Plan. The Chapter designates the future use or reuse of the land within a given jurisdiction, and contains goals, policies, and programs to guide land use and reuse. The Chapter also contains the Land Use Diagram, a general guide to land use distribution, which is then interpreted through specific plans (such as the proposed project) and the zoning map. Relevant policies of the Land Use Chapter are analyzed below with respect to the project's consistency with them. Generally, relevant programs under particular policies are evaluated, and the project's consistency or inconsistency with the programs equates to consistency or inconsistency with the policy that the program supports.

Policy 1.2.1

The City shall strive to retain the relative balance of land uses.

Program 1.2.1.1

Retain the balance between single family residential, multi-family residential, commercial, industrial, schools and open space.

Consistency with Program 1.2.1.1

The City's Land Use Diagram designates the project site as Mixed Use, which allows combinations of commercial and manufacturing uses. The proposed project consists of a mix of commercial retail, technology and business park, light industrial, hospital and medical office, and ancillary uses. These uses are consistent with the project site's General Plan designation. Land uses within the City were considered to be balanced at the time of the General Plan Land Use Chapter update in 1992 (City 1992, page I-7), and to the extent that the General Plan Land Use Chapter and Land Use Diagram were formulated to retain this balance of land uses, the proposed project's consistency with the site's land use designation constitutes consistency with this policy and this program. The proposed project would, therefore, be consistent with Program 1.2.1.1.

Program 1.2.1.3

Promote land uses within Downey that diversify the tax base.

Consistency

The proposed project includes a mix of uses that were selected to be responsive to specific market demand, including configuration of uses for motion picture and television production—uses not currently found in Downey except on a temporary basis. The proposed project therefore has the potential to introduce a new source of tax revenue for the City, and would, therefore, represent a potential diversification of the City's tax base. The proposed project is consistent with Program 1.2.1.3.

Policy 1.3.1

The City shall encourage quality construction of development as properties recycle.

Program 1.3.1.2

Adopt Floor-area ratios (FAR) to determine building intensity.

The floor area ratio range for mixed use is 0.6 to 4.0.

The General Plan sets quantitative development intensity targets for the NASA site, with the caveat that these figures are conceptual only and actual numbers will be determined by a specific plan (such as the proposed project).

Consistency

Pursuant to the above-listed information, a Specific Plan is being prepared for the proposed project site. Development targets listed above have been taken into consideration during preparation of the Specific Plan. The FAR for the proposed project would be 0.43. The City has determined that this reduced FAR is acceptable for the proposed uses and would not be inconsistent with the General Plan.

Policy 1.3.2

The City shall encourage adaptive re-use of older structures.

Program 1.3.2.1

Encourage preservation and renovation of older structures.

Consistency

The proposed project could result in the demolition of the majority of the existing structures on the project site. The proposed Specific Plan includes a development option that would preserve Buildings 1, 6, 9, 11, 14, 39, 288 and 290. These structures would be re-used for motion picture production, commercial, industrial, or public uses. As discussed in the Initial Study for the project (Appendix A), an MOA among NASA, GSA, SHPO and the City identifies necessary measures to resolve the potential adverse effects of project implementation on historic structures on the project site, and encourages preservation and renovation of older structures. Preservation of the historic portion of Building 1 will occur, irrespective of which option is implemented. The proposed project is, therefore, consistent with Program 1.3.2.1.

Policy 1.3.3

The City shall create areas for mixed land uses.

Program 1.3.3.1

Designate areas for mixed land uses, with residential/commercial or commercial/manufacturing.

Consistency

The proposed project site has been designated for mixed use in the City General Plan. The project proposes a mix of commercial, business park uses, and hospital and medical office on site, consistent with this designation. The Specific Plan would include a retail shopping center within Area I, either a motion picture studio and production space as well as technology and business park uses in Area

II and up to 1,000,000 sq. ft. of hospital and medical office use in the Kaiser portion of the site. The proposed project is, therefore, consistent with Program 1.3.1.1.

Policy 1.6.1

The City shall monitor, review and comment on regional plans, as they refer to the City's General Plan.

Program 1.6.1.2

Examine and promote land uses that encourage telecommuting, thus reducing VMT (Vehicle Miles Traveled) as required by the air quality plan.

Consistency

The proposed project proposes substantial area of business park development, ranging from 600,000 to 1,500,000 sq. ft. of this development. Office development includes the types of businesses that would allow telecommuting, in contrast to pure retail uses that would require personnel on-site. The proposed project is, therefore, consistent with Program 1.6.1.2.

Program 1.6.2.3

Recognize the economic competitiveness between communities and consider land use decisions based on that competitiveness.

Consistency

The project proposes re-use of a 160-acre parcel with commercial, technology and business park, and hospital uses. As discussed above, proposed re-use would attract retail, office, flex-tech, and motion picture studio and production uses. This mix of uses was selected to respond to specific market and business demand, and to attract different types of businesses into the City to diversify the City's tax base. Additionally, the proposed Kaiser project is a replacement for a facility currently located in another city. The proposed project is, therefore, consistent with Program 1.6.2.3.

Allowable Uses – Mixed Use

Commercial/Manufacturing – This category includes commercial and manufacturing uses and is intended to accommodate both, such as a business park. The floor area ratio range is 0.6 to 4.0.

Mixed Use – This category includes residential/commercial uses and commercial/manufacturing uses.

The proposed project includes an FAR of 0.43. This ratio is below the permitted range of 0.6 to 4.0.

Southern California Association of Governments

SCAG's Regional Comprehensive Plan and Guide (RCPG) is a major tool for coordinating regional planning. SCAG's RCPG policies related to land use that are applicable to the proposed project are listed below, and the consistency of the proposed project with these policies is provided. Applicable policies identified by SCAG personnel include the following.

Policy 3.05

Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.

Consistency

The proposed Specific Plan explores re-use of existing structures, including all or a portion of Buildings 1, 6, 9, 11, 14, 39, 288 and 290. Potential reuse of all or a portion of these structures would result in re-use of potentially over 1 million sq. ft. of existing development. An electrical substation is currently located on site. The substation in combination with the electrical system infrastructure could be reused by the proposed project. Much of the remaining infrastructure, however, including water, sewer, and other utility lines may be obsolete and could require replacement. Nonetheless, the proposed project is, therefore, consistent with Policy 3.05.

Policy 3.09

Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

Consistency

The proposed project would reuse existing infrastructure where feasible and reduce associated costs. An electrical substation is currently located on site. The substation in combination with the electrical system infrastructure would be reused by the proposed project. Much of the remaining infrastructure, including water, sewer, and other utility lines may be obsolete and could require replacement. The proposed project is, therefore, consistent with Policy 3.09.

Policy 3.10

Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

Consistency

The lead agency has committed to processing of permits for the proposed project along the most rapid schedule practicable. The proposed project is, therefore, consistent with Policy 3.0.10.

Policy 3.12

Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike. In addition, Kaiser's Kaiserider program will assist in reducing the number of auto trips and vehicle miles traveled.

Consistency

The proposed project is located in proximity to major transit routes. The site is bounded on the west by Lakewood Boulevard (State Route 19) and Imperial Highway to the south. It is 1¼ miles west of I-605, 2½ miles south of I-5 and ¼ mile north of the Glenn Anderson Freeway and Green Line transitway. Proximity to these major transit routes encourages use of transit. The proposed project is, therefore, consistent with Policy 3.12.

Policy 3.13

Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.

Policy 3.14

Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.

Policy 3.16

Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.

Consistency

The project proposes redevelopment of a 160-acre parcel formerly used for a combination of manufacturing, research, and aerospace activities and located along a major transit route. The majority of the project site is currently vacant and subject to temporary use. The proposed in-fill and redevelopment project would develop the site with up to 3.7 million sq. ft. of new commercial, retail, industrial, technology/business park, parking structure, and hospital and medical office uses and

would increase the existing density of development. The site is located within the City of Downey, a largely developed area. As discussed immediately above, the site is located in proximity and is accessible to major transit routes. The proposed project is, therefore, consistent with Policies 3.13, 3.14, and 3.16.

Policy 3.18

Encourage planned development in locations least likely to cause environmental impact.

Consistency

The project site's zoning allows general manufacturing; has a history of intensive manufacturing, research, and aerospace activities; and has been altered from its original condition through grading, paving, and development. In addition, the site is along major transit routes in the area. The proposed project considers re-use of eight existing buildings on the site. Therefore, the proposed project is situated in a location least likely to cause environmental impacts. The proposed project is, therefore, consistent with Policy 3.18.

3.5.3 Thresholds of Significance

The proposed project would have a significant impact on land use if it would:

- Cause a change in land use that would result in a conflict with adopted City plans and policies that could create a significant environmental effect.

3.5.4 Impacts

Less Than Significant Impacts

As discussed in section 3.5.3, the proposed project would be consistent with the City's General Plan Land Use Chapter and with SCAG's Regional Comprehensive Plan and Guide. Therefore, impacts would be less than significant.

Potentially Significant Impacts

Implementation of the proposed project would not result in any potentially significant land use impacts.

Significant Unavoidable Impacts

Implementation of the proposed project would not result in any significant unavoidable land use impacts.

3.5.6 Cumulative Impacts

The proposed project would not result in any inconsistencies with adopted plans and policies. Therefore, it would have a less than significant contribution to cumulative land use impacts.

3.5.7 Mitigation

Because impacts would be less than significant, no mitigation measures would be required.

3.6.1 Introduction

This section focuses on the effects of noise that would be generated by the proposed project on nearby noise sensitive land uses. Section 3.3.2 (Existing Conditions) provides a description of general noise principles. The discussion of noise sources, sensitive receptors, and noise levels associated with the project and adjacent land uses are also provided in Section 3.3.2. Section 3.3.3 describes the regulatory framework for environmental noise, and Sections 3.3.4 through 3.3.7 evaluate the project-related noise impacts from construction and operation. The noise measurements collected on-site, and in the vicinity of the project site, are included as Appendix D of this Draft EIR.

3.6.2 Existing Conditions

Fundamentals of Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale – dBA - provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady “background” noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Table 3.6-1 lists noise levels for common events in the environment and industry.

Noise Source (Distance)	Average Sound Level in dBA	Subjective Impression
Civil Defense Siren (100')	130	Pain Threshold
Jet Takeoff (200')	120	
Rock Music Concert (50')	110	
Pile Driver (50')	100	Very Loud
Ambulance Siren (100')	90	
Pneumatic Drill (50')	80	
Freeway (100')	70	Moderately Loud
Vacuum Cleaner (10')	60	
Light Traffic (100')	50	
Large Transformer (200')	40	Quiet
Soft Whisper (5')	30-0	Threshold of Hearing

Source: Arnold Peterson and Ervin Gross, 1963

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq} , the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 10 dBA "penalty" added to noise during the hours of 10:00 p.m. to 7:00 a.m., and an additional 5 dBA penalty during the hours of 7:00 p.m. to 10:00 p.m. to account for noise sensitivity in the evening and nighttime.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated natural settings can provide noise levels as low as 20 dBA, and quiet suburban residential streets can provide noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas - typically 55-60 dBA - and commercial locations - typically 60 dBA. People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas -60-75 dBA - or dense

urban or industrial areas - 65-80 dBA. Generally, a difference of 3 dBA over 24-hours is a barely-perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness.

Noise levels from a particular source generally decline as distance to the receptor increases. Other factors such as the weather and reflecting or shielding also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA. Noise from stationary or point sources is reduced by about 6 dBA for every doubling of distance. Noise levels may also be reduced by intervening structures—generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 dBA with closed windows. The exterior-to-interior reduction of newer homes is generally 30 dBA or more.

Existing Noise Conditions

Noise Sources

The Noise Chapter of the Downey General Plan reports that noise in Downey is primarily caused by automobile and truck traffic. Trains, airplanes and helicopters are also a source of noise in Downey. Commercial and industrial operations also generate noise from stationary or point sources.

Sensitive Receptors

Certain types of land uses are considered to be more sensitive than others to higher noise levels. In Downey, examples of sensitive receptors include residences of all types, hospitals, rest homes, convalescent hospitals, places of worship, libraries, and schools. Sensitive receptors in the vicinity of the project site include single and multi-family residential uses, schools, and senior care facilities.

Existing Noise Levels

On-Site Noise Levels

The project site contains some 124 buildings, structures, and other built features. The largest of these buildings along with three smaller buildings are sometimes used for motion picture production. Noise levels are generated on a daily basis by landscape maintenance equipment and human activity within the site. Additional noise is generated by motor picture production activities. Depending on the production, sources of noise could include peoples voices, loudspeakers, mechanical equipment, and even staged explosions. However, the primary source of noise at the project site is vehicular traffic on the adjacent roadways. The average daily noise levels associated with these roadways are presented in Table 3.6-2.

**TABLE 3.6-2
EXISTING ON-SITE NOISE LEVELS**

Segment/Description	CNEL at 100 Feet	Distance to Noise Contour		
		70 CNEL	65 CNEL	60 CNEL
Lakewood Blvd., between Stewart & Gray and Alameda	66.1	40	128	404
Lakewood Blvd. between Alameda and Clark	66.4	43	137	433
Imperial Hwy., between Clark and Bellflower	66.8	48	151	476
Bellflower Blvd. between Stewart & Gray and Washburn	64.5	29	90	285
Bellflower Blvd. between Washburn and Imperial	64.5	29	90	285
Stewart & Gray Rd., between Lakewood and Bellflower	64.1	26	81	258
Clark Ave., between Lakewood and Imperial	58.7	--	--	74

Note: Distances are in feet from roadway centerline, using Caltrans Traffic Noise Analysis Protocol, October 1998.
 -- Noise contour is located within the roadway lanes.
Source: EIP Associates, 2001.

Off-Site Noise Levels

Noise levels associated with vehicular traffic were calculated for the roadway links in the project vicinity that have noise sensitive uses facing the roadways. The average daily noise levels along these roadway segments are presented in Table 3.6-3.

**TABLE 3.6-3
EXISTING OFF-SITE NOISE LEVELS**

Segment/Description	Noise Sensitive Uses	CNEL at 100 Feet
Lakewood Blvd., between Firestone and Bellflower	Residential	66.9
Lakewood Blvd., between Bellflower and Stewart & Gray	Residential	65.5
Lakewood Blvd., between Stewart & Gray and Alameda	Residential & Senior Care	66.1
Lakewood Blvd., between Alameda and Clark	Residential	66.4
Lakewood Blvd., between Clark and Imperial	Residential and School	66.6
Bellflower Blvd., between Lakewood and Stewart & Gray	Residential	62.3
Bellflower Blvd. between Stewart & Gray and Washburn	Residential	64.5
Stewart & Gray Rd., west of Lakewood	Residential	63.5
Stewart & Gray Rd., between Lakewood and Bellflower	Residential	64.1
Stewart & Gray Rd., east of Bellflower	Residential	63.8
Imperial Hwy., between Bellflower and Woodruff	Residential	66.7
Clark Ave., between Bellflower and Imperial	Residential	58.7

Note: Distances are in feet from roadway centerline, using Caltrans Traffic Noise Analysis Protocol, October 1998.
Source: EIP Associates, 2001.

3.6.3 Regulatory Framework

The Noise Control Act of 1972 assigns the U.S. EPA the responsibility of developing regulations to adequately control environmental noise such that it does not endanger the population's health and welfare. The EPA established the Office of Noise Abatement and Control, but in 1981, funding for the office was removed. Similarly, the California Department of Health Services' once operated an Office of Noise Control that has since been disbanded. As such, environmental noise protection is usually a local government responsibility.

State of California

California encourages each local government entity to perform noise studies and implement a noise element as part of their general plan. The Office of Noise Control at the California Department of Health Services published guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The Department of Health guidelines indicate that residential land uses and other noise sensitive receptors generally should locate in areas where exterior ambient noise levels do not exceed approximately 70 dBA CNEL. Exterior noise levels of 60 CNEL and lower are considered to be “normally acceptable” for single family, duplex, and mobile homes involving traditional construction without any special noise insulation requirements. Exterior noise levels up to 70 dBA CNEL are considered to be “conditionally acceptable” for residential use where the proposed uses may be conditioned to include noise insulation features. Application of this guideline to development projects is not mandated by the Department of Health, but the Department recommends consideration of the guidelines in jurisdictions’ general plans.

Title 24 of the California Code of Regulations (California Noise Insulation Standards, California State Building Code [Part 2, Title 24, CCR]) establishes standards governing interior noise levels that apply to all new (post-1974) multifamily residential units (hotels, motels, apartments, condominiums, and other attached dwellings) in California. These standards require that acoustical studies be performed prior to construction at residential building locations where the existing exterior noise levels exceed 60 dBA CNEL. Such acoustical studies are required to establish a design that will limit maximum noise levels to 45 dBA CNEL in any habitable room.

City of Downey Noise Chapter of the General Plan

The Noise Chapter of the Downey General Plan is a program for establishing and maintaining various land uses in relationship to the levels of noise found in the City. The Chapter identifies goals, policies, and programs to address noise issues. The following policies and programs in the Noise Chapter are applicable to the proposed project.

Policy 6.1.1

The City shall require noise reduction measures in all new construction where necessary.

Program 6.1.1.2

Require the preparation and submittal of acoustical reports by a recognized acoustical engineer for noise sensitive land use developments that will be located in areas with an exterior noise level greater than 60 dBA CNEL. These reports shall identify appropriate noise mitigation measures to address the noise impacts.

Consistency

Of all the proposed uses at the project site, only the Kaiser hospital is considered a noise sensitive land use. This EIR section assesses noise impacts on this hospital facility and existing noise sensitive uses in the vicinity of the project site. It also identifies measures to mitigate noise impacts. The proposed project would, therefore, be consistent with Program 6.1.1.2 of the Noise Chapter.

Land use compatibility guidelines of the Noise Chapter are similar to the California Department of Health guidelines. According to the Noise Chapter, noise sensitive uses are “normally acceptable” in a noise environment under 60 dBA CNEL. Over 60 dBA CNEL, noise sensitive uses would be acceptable with appropriate mitigation or insulation features. Office and commercial uses would be “normally acceptable” in a noise environment up to 70 dBA CNEL, and office and commercial uses with modern architectural features (such as closed windows and a mechanical system for full-time ventilation), such as the proposed uses, would be acceptable in a noise environment up to 77.5 dBA CNEL. Industrial uses would be “normally acceptable” in a noise environment up to 75 dBA CNEL, or 80 dBA CNEL with appropriate insulation features.

City of Downey Noise Ordinance

The City has adopted noise standards as part of the Downey Municipal Code (Chapter 6, Unnecessary Noise). Construction noise is limited by the ordinance to between the hours of 7:00 A.M. to 10:00 P.M. Standards of the ordinance also include nuisance criteria and maximum permissible noise levels for noise sources not operating in a public right-of-way. These noise standards, shown in Table 3.6-4, apply to all sources of noise other than roadway traffic noise.

Land Use	7:00 A.M. to 10:00 P.M.	10:00 P.M. to 7:00 A.M.
Residential	55 dBA L_{eq}	45 dBA L_{eq}
Commercial	55 dBA L_{eq}	55 dBA L_{eq}
Manufacturing	55 dBA L_{eq}	55 dBA L_{eq}
Source: Noise Chapter of the Downey General Plan, p. VI-15.		

3.6.4 Thresholds Of Significance

Based on the Noise Element of the General Plan and the City’s Noise Ordinance, noise impacts are considered significant if one or more of the following conditions would result from implementation of the proposed project:

- Generate noise levels that would conflict with the Noise Chapter of the Downey General Plan or violate the Noise Ordinance standards;

- Cause an increase of 3 dBA or more at noise sensitive locations where the resulting exterior level would exceed 60 dBA CNEL. This 3 dBA increase would represent a perceptible increase to an environment with conditions that are already louder than normally acceptable.
- Cause an increase of 5 dBA or more at noise sensitive locations where the resulting level would be less than 60 dBA CNEL. This 5 dBA increase would represent a readily perceptible increase in the existing noise environment.

Any increase in noise that is less than 3 dBA would not represent a perceptible increase and would not be significant.

3.6.5 Impacts

The proposed project would result in the generation of short-term construction-related noise during the project build-out phases. During project occupation and operation, increased traffic and other activity associated with the new uses would cause increased noise. The compatibility of the proposed uses with the existing noise environment is also addressed.

Less Than Significant Impacts

Land Use Compatibility of New Uses

Future noise levels at the project site would continue to be dominated by vehicular traffic on the adjacent roadways. The future average daily noise levels associated with these roadways are presented in Table 3.6-5. Based on the identified noise contour distances, the Kaiser hospital building would be exposed to exterior noise levels that exceed 60 dBA CNEL. However, the exterior-to-interior reduction of new hospitals with closed windows and mechanical systems for full-time ventilation is generally 30 dBA or more. Therefore, the interior noise levels would be below 45 dBA CNEL, which is the City's standard for noise sensitive uses. None of the other proposed uses would be exposed to noise levels that exceed 75 dBA CNEL. Because the proposed uses would include standard architectural features (such as closed windows and a mechanical system for full-time ventilation) that would provide noise insulation for occupants of the uses, the proposed uses would be acceptable in the future noise environment. This impact would be less than significant.

**TABLE 3.6-5
FUTURE (2006) ON-SITE NOISE LEVELS**

Segment/Description	CNEL at 100 Feet	Distance to Noise Contour		
		70 CNEL	65 CNEL	60 CNEL
Lakewood Blvd., between Stewart & Gray and Alameda	67.3	54	171	540
Lakewood Blvd. between Alameda and Clark	67.6	57	182	574
Imperial Hwy., between Clark and Ardis	68.0	63	199	631
Imperial Hwy., between Ardis and Bellflower	67.6	58	184	581
Bellflower Blvd. between Stewart & Gray and Washburn	66.9	49	156	492
Bellflower Blvd. between Washburn and Imperial	66.9	49	154	487
Stewart & Gray Rd., between Lakewood and Bellflower	65.3	34	106	337
Clark Ave., between Lakewood and Imperial	60.2	--	33	104

Note: Distances are in feet from roadway centerline, using Caltrans Traffic Noise Analysis Protocol, October 1998.
-- Noise contour is located within the roadway lanes.
Source: EIP Associates, 2001.

Noise Increases at Off-Site Locations

Noise sensitive locations in the project vicinity would experience increased noise caused by project traffic and other activities associated with occupation and operation of the development. The increases in noise levels along the study-area roadway segments are identified in Table 3.6-6 for the Downey Landing, LLC project, Table 3.6-7 for the Kaiser project, and Table 3.6-8 for the combined projects. Based on this information, the proposed Downey Landing, LLC project would increase local noise levels by 0.2 to 0.9 dBA CNEL. This would be a less than significant impact. The Kaiser project would increase local noise levels by 0.1 to 1.2 dBA CNEL, which would be less than significant. The combined projects would increase local noise levels by 0.3 to 1.9 dBA CNEL. As with the individual projects, these increases would be less than significant. Noise level calculations are based on a previous site plan. Although noise level increases may be slightly different for the revised site plan, impacts would not change.

TABLE 3.6-6 FUTURE (2006) OFF-SITE NOISE LEVELS WITH DOWNEY LANDING, LLC PROJECT				
Segment/Description	Noise Sensitive Uses	Noise Levels in dBA CNEL		
		Future w/o Downey Landing, LLC Project	Future with Downey Landing, LLC Project	Increase in Noise
Lakewood Blvd., between Firestone and Bellflower	Residential	67.3	67.6	0.3
Lakewood Blvd., between Bellflower and Stewart & Gray	Residential	65.9	66.1	0.2
Lakewood Blvd., between Stewart & Gray and Alameda	Residential and Senior Facilities	66.5	67.3	0.8
Lakewood Blvd., between Alameda and Clark	Residential	66.8	67.5	0.7
Lakewood Blvd., between Clark and Imperial	Residential and School	67.1	67.7	0.6
Bellflower Blvd., between Lakewood and Stewart & Gray	Residential	62.7	63.0	0.3
Bellflower Blvd. between Stewart & Gray and Washburn	Residential	65.0	65.9	0.9
Stewart & Gray Rd., west of Lakewood	Residential	63.9	64.3	0.4
Stewart & Gray Rd., between Lakewood and Bellflower	Residential	64.5	64.8	0.3
Stewart & Gray Rd., east of Bellflower	Residential	64.2	64.8	0.6
Imperial Hwy., between Bellflower and Woodruff	Residential	67.1	67.4	0.3
Clark Ave., between Lakewood and Imperial	Residential	59.1	59.9	0.8
Note: Distances are in feet from roadway centerline, using Caltrans Traffic Noise Analysis Protocol, October 1998.				
Source: EIP Associates, 2001.				

**TABLE 3.6-7
FUTURE (2006) OFF-SITE NOISE LEVELS WITH KAISER PROJECT**

Segment/Description	Noise Sensitive Uses	Noise Levels in dBA CNEL		
		Future w/o Kaiser Project	Future with Kaiser Project	Increase in Noise
Lakewood Blvd., between Firestone and Bellflower	Residential	67.3	67.5	0.2
Lakewood Blvd., between Bellflower and Stewart & Gray	Residential	65.9	66.0	0.1
Lakewood Blvd., between Stewart & Gray and Alameda	Residential and Senior Facilities	66.5	66.5	0.0
Lakewood Blvd., between Alameda and Clark	Residential	66.8	66.9	0.1
Lakewood Blvd., between Clark and Imperial	Residential and School	67.1	67.1	0.0
Bellflower Blvd., between Lakewood and Stewart & Gray	Residential	62.7	63.4	0.7
Bellflower Blvd. between Stewart & Gray and Washburn	Residential	65.0	66.2	1.2
Stewart & Gray Rd., west of Lakewood	Residential	63.9	64.3	0.4
Stewart & Gray Rd., between Lakewood and Bellflower	Residential	64.5	65.0	0.5
Stewart & Gray Rd., east of Bellflower	Residential	64.2	64.8	0.6
Imperial Hwy., between Bellflower and Woodruff	Residential	67.1	67.4	0.3
Clark Ave., between Lakewood and Imperial	Residential	59.1	59.4	0.3

Note: Distances are in feet from roadway centerline, using Caltrans Traffic Noise Analysis Protocol, October 1998.
Source: EIP Associates, 2001.

**TABLE 3.6-8
FUTURE (2006) OFF-SITE NOISE LEVELS WITH COMBINED PROJECTS**

Segment/Description	Noise Sensitive Uses	Noise Levels in dBA CNEL		
		Future w/o Projects	Future with Projects	Increase in Noise
Lakewood Blvd., between Firestone and Bellflower	Residential	67.3	67.8	0.5
Lakewood Blvd., between Bellflower and Stewart & Gray	Residential	65.9	66.2	0.3
Lakewood Blvd., between Stewart & Gray and Alameda	Residential and Senior Facilities	66.5	67.3	0.8
Lakewood Blvd., between Alameda and Clark	Residential	66.8	67.6	0.8
Lakewood Blvd., between Clark and Imperial	Residential and School	67.1	67.7	0.6
Bellflower Blvd., between Lakewood and Stewart & Gray	Residential	62.7	63.7	1.0
Bellflower Blvd. between Stewart & Gray and Washburn	Residential	65.0	66.9	1.9
Stewart & Gray Rd., west of Lakewood	Residential	63.9	64.7	0.8
Stewart & Gray Rd., between Lakewood and Bellflower	Residential	64.5	65.3	0.8
Stewart & Gray Rd., east of Bellflower	Residential	64.2	65.3	1.1
Imperial Hwy., between Bellflower and Woodruff	Residential	67.1	67.7	0.6
Clark Ave., between Lakewood and Imperial	Residential	59.1	60.2	1.1

Note: Distances are in feet from roadway centerline, using Caltrans Traffic Noise Analysis Protocol, October 1998.
Source: EIP Associates, 2001.

Potentially Significant Impacts

Construction Noise Levels

Project development would occur over a five-year period and would primarily include demolition of existing structures, site preparation (grading and excavation), and construction of internal roadways, driveways, and structures, as well as utility infrastructure installation. These activities typically involve the use of heavy equipment, such as scrapers, tractors, loaders, concrete mixers, cranes, etc. Trucks would be used to deliver equipment and building materials and to haul away waste materials. Smaller equipment, such as jack hammers, pneumatic tools, saws, and hammers would also be used throughout the site during the construction phases. This equipment would generate both steady state and episodic noise that would be heard both on and off the project site.

The U.S. Environmental Protection Agency (U.S. EPA) has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Figure 3.6-9 Typical Outdoor Construction Noise Levels. Noise levels generated by heavy equipment can range from approximately 68 dBA to noise levels in excess of 100 dBA when measured at 50 feet. However, these noise levels would diminish rapidly

with distance from the construction site at a rate of approximately 6.0 dBA per doubling of distance. For example, a noise level of 68 dBA measured at 50 feet from the noise source to the receptor would reduce to 62 dBA at 100 feet from the source to the receptor, and further reduce by another 6.0 dBA to 56 dBA at 200 feet from the source to the receptor.

Construction Phase	Noise Levels at 50 feet (dBA L_{eq})	Noise Levels at 50 feet with Mufflers (dBA L_{eq})
Ground Clearing	84	82
Excavation, Grading	89	86
Foundations	78	77
Structural	85	83
Finishing	89	86

Source: EPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, PB 206717, 1971.

Noise levels generated during the construction phases would primarily affect the occupants of on-site uses constructed in the earlier development phases (including existing uses). Any locations within the residential areas (primarily to the north, east, and west) that would have an uninterrupted line of site to the construction noise sources could be exposed to construction noise levels that could on some days exceed the land use compatibility guidelines for noise incorporated in the City's General Plan. Noise level calculations are based on a previous site plan. Although noise level increases may be slightly different for the revised site plan, impacts would not change.

Because the construction activities could cause the land use compatibility guidelines to be exceeded intermittently during the anticipated five years of development at existing off-site and future on-site uses, construction noise impacts are considered potentially significant without mitigation. In order to reduce the potential impacts associated with construction activities, the Noise Ordinance restricts construction work to between the hours of 7:00 A.M. and 10:00 P.M. each day. Implementation of **Mitigation Measure 3.6-1** would be necessary to reduce project construction noise to less than significant levels.

Studio Noise Sources

As discussed previously, a portion of the project site is sometimes used for motion picture production. Depending on the production, sources of noise could include peoples voices, loudspeakers, mechanical equipment, and even staged explosions. Given the variable nature of these types of noise, it is not possible to predict noise levels at locations around the site. It is possible that they could exceed the City's adopted Municipal Code noise standards at the Kaiser hospital and nearby residential properties. The Downey Landing Specific Plan allows City staff to waive these standards for individual productions, subject to their approval, when plans are submitted that identify the sources of noise, hours of noise generation, and a program to notify the hospital and

nearby residential units of the types of noise and hours of noise generation. This review and approval procedure would reduce the potential impacts of movie production noise to less than significant levels.

Significant, Unavoidable Impacts

None.

3.2.6 Cumulative Impacts

Construction noise would create an intermittent impact on the noise environment that would be short-term occurring only through the duration of the construction phases. Because the duration of the construction noise impact would be limited to the duration of the construction phases, no cumulative impacts would occur.

Cumulative noise level impacts would primarily occur as a result of increased traffic on the study-area roadway segments. Table 3.6-10 identifies the increases in noise levels that would occur from existing levels to the future conditions with the project. As shown, future traffic volumes would not substantially increase noise levels in the project vicinity. Cumulative noise levels caused by the project would not cause a significant impact.

**TABLE 3.6-10
FUTURE (2006) OFF-SITE NOISE LEVELS WITH CUMULATIVE PROJECTS**

Segment/Description	Noise Sensitive Uses	Noise Levels in dBA CNEL		
		Existing Noise Levels	Future with Projects	Increase in Noise
Lakewood Blvd., between Firestone and Bellflower	Residential	66.9	67.8	0.9
Lakewood Blvd., between Bellflower and Stewart & Gray	Residential	65.5	66.2	0.7
Lakewood Blvd., between Stewart & Gray and Alameda	Residential and Senior Facilities	66.1	67.3	1.2
Lakewood Blvd., between Alameda and Clark	Residential	66.4	67.6	1.2
Lakewood Blvd., between Clark and Imperial	Residential and School	66.6	67.7	1.1
Bellflower Blvd., between Lakewood and Stewart & Gray	Residential	62.3	63.7	1.4
Bellflower Blvd. between Stewart & Gray and Washburn	Residential	64.5	66.9	2.4
Stewart & Gray Rd., west of Lakewood	Residential	63.5	64.7	1.2
Stewart & Gray Rd., between Lakewood and Bellflower	Residential	64.1	65.3	1.2
Stewart & Gray Rd., east of Bellflower	Residential	63.8	65.3	1.5
Imperial Hwy., between Bellflower and Woodruff	Residential	66.7	67.7	1.0
Clark Ave., between Lakewood and Imperial	Residential	58.7	60.2	1.5

Note: Distances are in feet from roadway centerline, using Caltrans Traffic Noise Analysis Protocol, October 1998.
Source: EIP Associates, 2001.

3.6.7 Mitigation

Mitigation Measure 3.6-1: The project developer shall incorporate the following best management practices for noise control of demolition and construction activities into the construction documents to be implemented by all project contractors:

- Maximize the physical separation between noise generators and noise receptors. Such separation includes, but is not limited to, the following measures: provide enclosures for stationary equipment and barriers around particularly noisy areas on the site or around the entire site; use shields, impervious fences, or other physical sound barriers, to inhibit the transmission of noise to sensitive receptors; and position stationary equipment to minimize noise impacts on the community;

- Require that all construction equipment engines be properly tuned and muffled according to manufacturers' specifications;
- Select haul routes for the removal of excavation materials and transport of building materials in conjunction with the City of Downey such that noise-sensitive (e.g., residential) areas are avoided as much as possible; and
- Neighbors within 500 feet of construction areas shall be notified of the construction schedule in writing, prior to construction. The project sponsor shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise. The coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented. A telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site.
- Construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m. with no construction allowed on Sunday.

3.7 Population and Housing

3.7.1 Introduction

This section provides baseline data on the existing population and housing characteristics of the City, including an overview of Downey population and housing growth trends. The Population and Housing section of the Initial Study (Appendix A) determined that the proposed project would result in less than significant population and housing impacts, with the exception of the potential for the creation of an unmet demand for housing within the City. Consequently, the impact analysis provided in this Draft EIR examines only that possible effect.

The data used in this section was obtained from various sources, including the United States Bureau of the Census (Census), the Southern California Association of Governments (SCAG), and the City of Downey General Plan Housing Chapter. Note that the City is currently updating the General Plan Housing Element.

3.7.2 Existing Conditions

Population Growth Trends

As illustrated in Table 3.7-1, the City's population increased during the last 30 years by about 21.3%. Although the population of Downey declined from 1970 to 1980, this decline was uncharacteristic, according to the City's General Plan Housing Chapter, and can be attributed to out-migration (adult children moving to search for employment and affordable housing) and the removal of over 340 homes and apartments for construction of the Century Freeway (I-105). After the 1970s, growth once again commenced at average rates ranging from one half of one percent per year to about two percent per year.

As also shown, from 1990 to 2000, Downey's estimated population increased by nine percent, from 91,444 to 99,900, according to SCAG's projections. However, using population figures from Census 2000, the actual population increase was 17.4%.

**TABLE 3.7-1
POPULATION GROWTH AND PROJECTED GROWTH
CITY OF DOWNEY (1980-2020)**

Year	Population	Period Increase (%)	Avg. Annual Growth (persons per year)	Avg. Annual Growth Rate (%)
1970 ¹	88,445	N/A	N/A	N/A
1980 ¹	82,581	-6.6	-1,173	-1.3
1990 ¹	91,444	10.7	1,773	2.2
2000 (actual) ¹	107,323	17.4	2,024	2.1
2000 (projected) ²	(99,900)	9.2	1,691	1.8
2005 (projected) ²	(102,900)	3.0	600	0.6
2010 (projected) ²	(105,900)	2.9	600	0.6
2015 (projected) ²	(108,800)	2.7	580	0.6
2020 (projected) ²	(113,200)	4.0	880	0.8

Sources: 1. US Census Bureau
2. Southern California Association of Governments

Table 3.7-2 below provides a comparison between Downey's projected growth within the Gateway Cities Subregion from 2000 to 2020. As shown in the table, the five-year increases in Downey are very similar to those of the Gateway Cities as a group. Additionally, average annual growth rates are projected to be similar, as well, with a maximum variation of less than one quarter of one percent between the five-year periods. However, note that the actual 2000 population, as computed by the Census Bureau, already exceeds SCAG's projected population for the year 2010. While growth could continue in the City at rates similar to those projected by SCAG, the raw projections for the City cannot directly be used.

**TABLE 3.7-2
COMPARISON OF PROJECTED POPULATION GROWTH
DOWNEY AND GATEWAY CITIES SUBREGION (2000-2020)**

Year	Period Increase (%)		Average Annual Growth Rate (%)	
	Downey	GC Subregion	Downey	CG Subregion
2000 (projected)	2.78	N/A	0.56	N/A
2005 (projected)	3.00	3.01	0.60	0.61
2010 (projected)	2.92	2.20	0.58	0.44
2015 (projected)	2.74	3.58	0.55	0.72
2020 (projected)	4.04	4.09	0.81	0.82

Source: Southern California Association of Governments

Household Size

A household is defined by the U.S. Census as a group of people who occupy a housing unit. A household differs from a dwelling unit in that the number of dwelling units includes vacant units. It is important to note that not all of the population lives in households; a portion live in group quarters, such as board and care facilities, while others are homeless.

Small households (1-2 persons per household) traditionally reside in units with 0-2 bedrooms, while family households (3-4 persons per household) normally reside in units with 3-4 bedrooms. Large households (5 or more persons per household) reside in units with 4 or more bedrooms. However, the number of units in relation to the household size may also reflect preference and economics. Thus, many small households prefer, and obtain, larger units. Conversely, some large families live in small units for purely economic reasons.

As seen in Table 3.7-3, the City had 34,302 households, with a household population of 89,485 in 1990. By 2000, the number of households had only grown to 34,612, an increase of 0.9%. During the same period, the household population grew to 105,364, representing an increase of about 18%.

Average household size fluctuates due to many factors. From 1990 to 2000, the average household size increased from 2.71 persons per household (pph) to 3.01 pph. Although Downey's average household size has increased, it is in proportion with the average household size for Los Angeles County as a whole (2.907 pph), and is less than the incorporated areas of the County (3.347 pph).

TABLE 3.7-3
HOUSEHOLD SIZE (1990 AND 2000)

Year	Total City Household Population ¹	% Change in City Household Pop. Per Year (avg.)	Total Number of Households ²	% Change in Total Number of Households	Household Size (pph) ³
1990	89,485	-	34,302	-	2.71
2000 ⁴	105,364	1.8%	34,612	0.9%	3.01

¹ Household Population = Total Population - Population living in Group Quarters or Homeless

² Number of Households = Number of Occupied Housing Units

³ Household Size = Household Population / Number of Households

⁴ Household population estimated, based on U.S. Census 2000 data, and same group quarter population as 1990.

Source: US Census Bureau

Housing Growth Trends

A city's housing market is driven by supply and demand. Many factors influence this market, including population growth, income, housing cost, and housing locations. However, age distribution is a key market characteristic because housing demand within the market is influenced by the housing preference of certain age groups. Due to limited income, the majority of the young

adult population (20-34 years old) tends to occupy apartments, low to moderate cost condominiums, and smaller single family units. The 35-65 year-old group provides the market for moderate to high cost apartments and condominiums and larger single family units because, on average, people of this age group have higher incomes and larger household sizes. For the elderly population (65 years of age and up), housing demands are similar to young adults, but also include group quarters and mobile homes as housing options.

Vacancy Rate

The vacancy rates and affordability of the housing stock are also key elements in the balance between supply and demand in the City's housing market. High vacancy rates usually indicate low demand and/or high prices in the housing market. Conversely, low vacancy rates usually indicate high demand and/or low prices in the housing market. However, vacancy rates are not the sole indicator of market conditions. They must be viewed in the context of all the characteristics of the local and regional market and economy.

Vacancy rates which indicate a "market balance" (a condition where rates indicate a reasonable level of vacancy) generally range from 1% to 3% for single family units, and from 3% to 5% for multi-family units. In 1990 and 2000, the City's vacancy rates were high for single-family units and moderate for multiple-family units at 3.76%. Note, however, that the City's current General Plan Housing Chapter (page III-59) indicates a desire, pursuant to the Regional Housing Needs Assessment (RHNA) for the City, to increase the vacancy rate from its level at that time of 1.8% to 3.2%. The RHNA model predicted that 507 new housing units would be necessary to achieve this vacancy rate; however, the Draft 2000-2005 Housing Element Update for the City includes a revised RHNA allocation of 482. While the City has only constructed about 457 units, the City has exceeded its target vacancy rate. Further, the Draft 2000-2005 Housing Element Update (page 4-4) shows that with the 638 potential housing units (for this 5-year planning horizon), the City has no remaining RHNA need.

Total vacancy rates include vacant units that are not available for rent or sale. This includes units that are rented for occasional purposes; units that have been rented or sold, but have not yet been occupied as of the date of the census; and units being held for repairs/modernization or for personal reasons of the owner (e.g., probate). Ultimately, these units should not be included in the vacancy rate because they are not on the market, and are not available for rental or purchase. In addition, the vacant rental units should include both assisted and unassisted living units, as well as units available only to senior citizens.

Table 3.7-4 shows the tenure of owner-occupied housing units versus renter-occupied housing units for the City. As shown by 1990 census data, about 48% of the housing stock was renter-occupied, while about 52% of the Downey housing stock was owner-occupied. A more recent figure is not

available at this time: the Draft Housing Element Update has incorporated these figures. However, due to the slight increase in single family home construction over the past ten years in Downey, it is assumed that the percentages have increased slightly.

**TABLE 3.7-4
TENURE – RENTER VERSUS OWNER (1990)**

	<u>Renter Occupied</u>	<u>Owner Occupied</u>
Total Housing Units	15,689	17,324

Source: 1990 U.S. Census, City of Downey 2001

State law requires jurisdictions to provide for their share of regional housing needs. Normally, as part of the RHNA, SCAG estimates five-year housing needs for cities within its region. The most recent data must take certain planning considerations into account, according to Section 65584 of the Government Code, and are based on population growth forecasts from the 1998-2005 Regional Transportation Plan for the 1998-2005 period. Table 3.7-5 shows the information for this period.

**TABLE 3.7-5
RHNA 5-YEAR HOUSING UNIT GROWTH NEEDS FOR THE CITY OF DOWNEY
(2001)**

<u>Income</u>	<u>Initial Allocation</u>	<u>Final Allocation</u>	<u>Percent of RHNA</u>
Household Growth	373 Units	373 Units	53%
Vacancy Need	33 Units	33 Units	-5%
Replacement Need	300 Units	76 Units	+42%
Total	706 Units	482 Units	100%

Sources: SCAG 2001; City of Downey 2001

The recent population, household, and employment (employment generated from businesses located within Downey) forecasts provided in Table 3.7-6 for the City and Gateway Cities Subregion were prepared by SCAG in April 1998. As stated above, the population estimates are low. Additionally, the 1999 closure of the industrial complex on the project site represented a loss of approximately 3,200 jobs (ERA 1999); however, the City assumed re-use and development of the site in the General Plan Land Use and Housing Elements, and as stated in Section 3.5 (Land Use and Planning), the General Plan assumed a maximum development intensity that is substantially greater than what is proposed under the Downey Landing Specific Plan.

**TABLE 3.7-6
SCAG POPULATION, HOUSING, AND EMPLOYMENT ESTIMATES**

	2000	2005	2010	2015	2020
Gateway Cities Subregion					
Population	2,086,500	2,149,700	2,196,900	2,275,500	2,368,600
Housing	597,400	606,600	620,100	636,600	669,900
Employment	879,300	938,900	1,017,700	1,063,300	1,110,400
City of Downey					
Population	99,900	102,900	105,100	108,800	113,200
Housing	33,700	33,900	34,200	34,600	35,400
Employment	51,500	54,700	58,900	61,400	64,400

Source: SCAG, 2001

Table 3.7-8 provides the number of workers per family in 1990. More current data is not available at this time; however, this data is useful as a proxy for workers per household for the purpose of showing general housing and employment trends.

**TABLE 3.7-7
WORKERS PER FAMILY IN DOWNEY (1989)**

Workers Per Family	Number of Families	Percentage of Total Families
None	2,889	12%
1	7,022	30%
2	10,294	43%
3	3,495	15%
<i>Total</i>	<i>23,700</i>	<i>100%</i>

Source: U.S. Census Bureau, 1990

3.7.3 Regulatory Framework

City of Downey General Plan Land Use Chapter

The Land Use Chapter is often perceived as the most representative portion of a General Plan. The Chapter designates the future use or reuse of the land within a given jurisdiction, and contains goals, policies, and programs toward this end. The Chapter also contains the Land Use Diagram, a general guide to land use distribution, which is then interpreted through specific plans (such as the proposed project) and the zoning map. Relevant policies of the Land Use Chapter are analyzed below with respect to the project's consistency with them. Generally, relevant programs under particular policies are evaluated, and the project's consistency or inconsistency with the programs equates to consistency or inconsistency with the policy that the program supports.

Policy 1.2.1

The City shall strive to retain the relative balance of land uses.

Program 1.2.1.1

Retain the balance between single family residential, multi-family residential, commercial, industrial, schools and open space.

Consistency with Program 1.2.1.1

The City's Land Use Diagram designates the project site as Mixed Use, which allows combinations of commercial and manufacturing uses. The proposed project consists of a mix of commercial retail, technology and business park, hospital and medical office, and light industrial uses. These uses are consistent with the project site's General Plan designation. Land uses within the City were considered to be balanced at the time of the General Plan Land Use Chapter Update in 1992 (City 1992, page I-7), and to the extent that the General Plan Land Use Chapter and Land Use Diagram were formulated to retain this balance of land uses, the proposed project's consistency with the site's land use designation constitutes consistency with this policy and this program. The proposed project would, therefore, be consistent with Program 1.2.1.1.

Program 1.2.1.3

Promote land uses within Downey that diversify the tax base.

Consistency

The proposed project includes a mix of retail commercial, technology and business park, hospital and medical offices, and light industrial uses that were selected to be responsive to specific market demand, including configuration of uses for motion picture and television production—uses not currently found in Downey except on a temporary basis. The proposed project has the potential to introduce a new and lucrative source of tax revenue for the City, and would, therefore, represent a potential diversification of the City's tax base. The proposed project is consistent with Program 1.2.1.3.

City of Downey General Plan Housing Chapter

The General Plan Housing Chapter does not contain policies related to population or housing that are applicable to the proposed project.

Southern California Association of Governments

SCAG's Regional Comprehensive Plan and Guide (RCPG) and RHNA are major tools for coordinating regional planning and housing development strategies in southern California. State Housing Law mandates that local governments, through Councils of Governments, identify existing and future housing needs in a RHNA. SCAG RCPG policies related to population and housing that are applicable to the proposed project are listed below, and the consistency of the proposed project with these policies is provided. Applicable policies identified by SCAG personnel include the following.

Policy 3.01

The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

Consistency with Policy 3.01

SCAG's projections show that room exists for additional employment opportunities, while still maintaining a balance with existing housing. Table 3.7-6 shows a prediction by SCAG that employment outstrips housing by about 1.5:1 (employment divided by housing); however, using assumptions gleaned from Table 3.7-7, 23,700 families (used here as a proxy for households) would include 38,095 workers, for a worker-to-household ratio of over 1.6:1 (this is achieved by multiplying the number of families by the number of workers per family, then dividing by the number of families, to produce an average ratio of workers per family). This ratio may, in fact, be slightly higher, because as shown in Table 3.7-3, the number of persons per household has increased in the last ten years. However, the age distribution of this increase cannot be determined from available data.

In addition to SCAG's projections for the City, the proposed project is consistent with the projected growth in jobs in the Gateway Cities Subregion, which as shown in Table 3.7-6, anticipates the provision of 59,600 jobs in the subregion from 2000 to 2005. As stated in SCAG's policy, these figures reflect local plans and policies, including the City's General Plan. The proposed project is, therefore, consistent with the assumptions in SCAG's housing and employment estimates for the City and subregion, which predict that the City and the subregion will eventually become jobs-rich.

Further, SCAG's population forecasts for the City of Downey are significantly (about 8%) lower than the actual Census 2000 counts: as described above, the Census counts exceed SCAG's projected population for the City at 2010, and closely approach SCAG's 2015 projection for the City. Also, SCAG's employment projections do not account for the loss of 2,200 to 3,200 jobs in the City, within the last two years, as a result of the closure of the former facility on the project site (ERA 1999).

SCAG's population and employment projections, therefore, understate the need for additional jobs within the City. This impression is underscored by the City's stated primary objectives for the proposed project (refer to Section 2.3 of this Draft EIR), which emphasize the creation, recapture, and diversity of quality employment opportunities within the City. Additionally, page III-59 of the City's General Plan Housing Chapter states that Downey is in close proximity to employment centers, such as Santa Fe Springs, Commerce, Pico Rivera, and Bellflower, that employ many Downey residents. This is particularly relevant to the Kaiser project, part of which includes the replacement of an existing facility in a neighboring city. Consequently, the proposed project represents an opportunity to capture these employees within the City of Downey, thereby decreasing new housing demand, which would further contribute to the maintenance of a balance between jobs and housing within the City.

As described above, the City has considered SCAG's forecasts in its planning with respect to the proposed project; therefore the project is consistent with Policy 3.01.

3.7.4 Thresholds of Significance

The proposed project would have a significant impact on population and housing if it would cause a change in population density, distribution, growth rate, or demand for housing that is significantly above what is forecast in adopted City plans and policies.

3.7.5 Impacts

Less Than Significant Impacts

Impact 3.7-1: The proposed project would not create a demand for housing units that is significantly above what is projected for in adopted City plans and policies.

Based on conservative employment generation rates for the uses proposed (an average of one employee per 300 gross sq. ft.), the Downey Landing, LLC project, at approximately 2.1 million sq. ft., would generate just about 7,100 jobs, in total, in about the following distribution:

- Area I: 900 employees (1 employee/550 sq. ft. for retail, 1/885 sq. ft. for large-format retail, and 1/175 sq. ft. for restaurant uses);
- Area IIA: 1,778 employees (an average of 1/250 sq. ft. for office uses); and
- Area IIB: 810 employees (an average of 1/300 sq. ft. for office and light industrial uses); and

- Area IIC: 1,539 employees (an average of 1/250 sq. ft. for office and uses); and
- Area IID: 2064 employees (an average of 1/250 sq. ft. for office uses)
- sq. ft.

These jobs would range in quality from minimum-wage employment opportunities, to creative and professional motion picture or television production-related employment. The current balance between housing and employment in the City of Downey, the higher-than-estimated potential demand for employment discussed above (an average of 1.6 workers per household, versus the predicted 1.5), potential future increases in employment demand as household size increases, and the vacancy rate of 3.76 percent, suggests that additional employment opportunities within the City are desirable and could be accommodated.

The proposed Kaiser portion of the project is a replacement facility for the current Bellflower location. Although the Kaiser portion of the project would employ approximately 2,437 people, it is assumed that many current employees would commute to the proposed facility, and therefore, will not create additional housing demands. In addition, the proposed project is consistent with development in the City, and was accounted for in the General Plan. In response to the 2000 Census, the Housing Element is currently in the process of being updated, and will reflect development and housing need projections based on implementation of the proposed project. All employees anticipated with the proposed project would not necessarily reside within the City of Downey, though the percentage cannot be predicted. The proposed project would not introduce growth that was not accounted for in the General Plan Land Use and Housing chapter, and therefore would not result in unforeseen housing demands.

As a result of the demand for housing being accounted for in the general plan, implementation of the proposed project would not create a direct demand for housing that is above projected needs, and any need for housing could be accommodated by existing or proposed housing units. Therefore, impacts resulting from a demand for housing would be **less than significant**.

Potentially Significant Impacts

Implementation of the proposed project would not result in any potentially significant population or housing impacts.

Significant Unavoidable Impacts

Implementation of the proposed project would not result in any significant unavoidable population or housing impacts.

3.7.6 Cumulative Impacts

The Cumulative Project List, as seen in Table 2-3 of this Draft EIR, identifies 4,853,934 sq. ft. of approved, pending, under construction, or foreseeable commercial and industrial uses within the area, not including the project site. In addition to those projects, SCAG projects the construction of 9,200 housing units in the Gateway Cities Subregion between 2000 and 2005 (see Table 3.7-6). In the foreseeable future, housing and employment opportunities are anticipated to become and then remain unbalanced, and in the short term, the proposed project, which consists of approximately 3.1 million sq. ft. of employment generating uses, represents about 36% of anticipated development in the subregion. However, as stated above in Sections 3.7-2 and 3.7-5, the General Plan Housing Element for the City of Downey, in both its previous and current draft incarnations, anticipated the development of the project site, as stated in the General Plan Land Use Chapter, at an intensity greater than that which is currently proposed. Consequently, the housing projections in the Housing Element consider the proposed project, and project housing needs accordingly. Further, as stated in the project objectives, a goal of the proposed project is to attract employees to the City of Downey, and to recover jobs lost by the closure of the NASA facility on the project site. It is anticipated that many of the employees would come from within the Gateway Cities Subregion, particularly in the case of the Kaiser portion of the project, which is a replacement for a similar facility in a neighboring city (Bellflower). Therefore, the proposed project would not generate a demand for housing above that which has been anticipated in applicable plans and policies. The project's contribution to population and housing impacts in the Gateway Cities Subregion would, therefore, not be considered cumulatively considerable, and would be less than significant.

3.7.7 Mitigation

The analysis determined that no significant population and housing impacts would result from the proposed project. Therefore, no mitigation measures are necessary.

3.8 Public Services and Utilities

3.8.1 Introduction

Public services include law enforcement, fire protection, schools, and solid waste collection; utilities include the provision of water, electricity, gas, reclaimed water, storm drains, and disposal of wastewater. Agencies providing these public services and utilities were contacted by the City as part of the scoping process for this EIR to obtain information regarding available service levels and current or anticipated constraints to the proposed development. Various public utilities, services, and facilities would need to be provided to the project site to support the development. The Initial Study prepared for this project (Appendix A) concluded that potential impacts to library, cable television, and telephone service would be less than significant, and would not warrant further evaluation.

This section provides a discussion of the existing public services and utilities available to the project, and the potential project demands placed on those public services. Section 3.8.2 contains information on the existing conditions within the project area, including descriptions of staffing levels, equipment, and response times of emergency services providers; information on local school capacities, and their overcrowding status; parks and recreation facilities; and other public services, utilities, and facilities existing within, or available to, the project area.

3.8.2 Existing Conditions

Schools

Three schools, all within the Downey Unified School District, currently serve the project area.

- Gauldin Elementary – design capacity 660, current enrollment 831 (126%)
- East Middle School – design capacity 1,144, current enrollment 1,226 (107%)
- Downey High School – design capacity 2,800, current enrollment 3,112 (111%)

Currently, overcrowding at the elementary level ranges from 4 to 26% over design capacity at seven out of fourteen of the District's schools. The enrollments are monitored closely and based upon growth patterns; relocatable buildings are leased or purchased for sites based upon enrollment vs. maximum capacity. Growth in Downey has continued over the past ten years and increased student enrollment at the elementary level has expanded to include the middle and high school levels, creating overcrowding at these sites as well. Of four middle schools, one is currently operating at 20% over design capacity; the others are filled to capacity. Of the two high schools, one is operating at near design capacity and the other is currently 11% over design capacity.

Natural population growth has been affecting the increased enrollment at the elementary level for the past ten years. As population growth continues, enrollments continue to grow district-wide, presenting many sites with overcrowding situations. This trend is predicted to continue, presenting not only problems with overcrowding at specific sites, but also land availability for placing relocatable classrooms at sites. No surplus school sites are available to accommodate new schools.

Fire

There are four City of Downey fire stations (see Table 3.8-1) and additional support provided by Los Angeles County Fire Station #98 in Bellflower. The Downey stations house four engines, one ladder truck, two paramedic rescue squads, one civilian ambulance squad, and one USAR (Urban Search and Rescue) vehicle. The Downey Fire Department (DFD) responded to 7,530 emergencies in 2000. Of the total, 2,062 calls were for fire or hazardous condition-related incidents, 4,776 were emergency medical responses, and 692 were mutual aid responses. Department suppression and rescue training is facilitated by a centrally located, in-city training tower, as well as a closed cable television network, which allows classes, meetings, or training films to be broadcast into any fire station within the City.

Standard structure fire response in the project area is from stations #1 and #2 as well as Los Angeles County Fire Department Station #98, with three fire engines, one ladder truck, one paramedic rescue ambulance, and one battalion commander, totaling a minimum of 16 personnel. Each engine company has a minimum staffing of three personnel: one captain, one engineer, and one firefighter. The ladder truck has a minimum staffing of four personnel: one captain, one engineer, and two firefighters. The rescue ambulance has a minimum of two personnel, both certified paramedics. The command vehicle is staffed by one battalion chief. The initial response from stations #1 and #2 is backed up by Downey Fire Stations #3 and #4, with preset mutual aid responses from the Fire Departments of Compton, Montebello, Santa Fe Springs, Vernon, and Los Angeles County. All DFD personnel are "Haz Mat first responder" certified, specially trained to handle toxic, flammable, or other hazardous materials.

The DFD focuses its resource pool and training in six budgeted programs: administration, fire suppression, emergency medical response and basic life support, joint fire communications, fire prevention/arson, and emergency preparedness. Management structure within the organization includes the Fire Chief, Assistant Fire Chief, three Battalion Chiefs, sixteen Captains, and a Deputy Fire Marshal/Hazardous Materials Specialist. The Department has a total of 69 firefighters and rescue personnel to cover an area of 12.8 square miles. Minimum staffing requirement for fire suppression is 21 firefighters.

**Table 3.8-1
City of Downey Fire Department**

<i>Station Number</i>	<i>Address</i>	<i>Apparatus</i>
Station #1	12222 Paramount Boulevard	1 engine; 1 ladder truck; 1 paramedic rescue; 1 battalion commander
Station #2	9556 Imperial Highway	1 engine
Station #3	9900 Paramount Boulevard	1 engine; 1 civilian ambulance
Station #4	9340 Florence Avenue	1 engine; 1 paramedic rescue
L.A. County Station #98	9814 Maplewood Avenue, Bellflower	1 engine

Source: City of Downey Fire Department, July 2, 2001

Police

The Downey Police Department (DPD) is located near the center of the City at 10911 Brookshire Avenue. The department is comprised of 182 total employees, which includes 115 sworn officers. This staff includes three Captains, six Lieutenants, 14 Sergeants, 24 Detectives, seven motorcycle officers, four administrative officers, and the remainder assigned to patrol. While predetermined patrol routes do not exist, the City of Downey officers patrol all of the areas of the City that are accessible to them. To provide balanced enforcement, the City has been divided into quadrants, and at least one officer is assigned to each area. In addition, Downey patrol officers are supplemented by traffic enforcement officers and detective personnel.

Wastewater

The project site is within the jurisdictional boundaries of Sanitation Districts of Los Angeles County, District No. 2. Two City of Downey 8-inch sanitary sewer lines collect wastewater from north and east of the proposed site and carry the flow southerly down Bellflower Boulevard. At Elm Vista, the two eight inch lines, and one eight inch line that collects flows from the area directly to the east, are combined into one eight inch line which continues to flow south to Washburn Road. At Washburn Road, the eight-inch line that collects flows from the area directly to the east are combined into one ten inch line that continues to flow south. One thousand feet south of Washburn Road, an eight-inch line that collects flows from the area on the west side of Bellflower Blvd., approximately eight hundred feet north of Imperial Highway, connects to the ten-inch line. The ten-inch line continues to flow south to Imperial Highway where eight-inch lines from the east and west side of the street are combined into one twelve-inch line that continues to flow south to Adoree. At this point, the twelve-inch line connects to the twenty-four inch County-owned Foster Road Trunk Sewer.

There are two eight-inch sewer lines in Imperial Highway. The first begins 750 feet east of Ardis Avenue and flows 550 feet to the east to the twelve-inch sewer line in Bellflower Blvd. The second begins 600 feet west of Ardis Avenue and flows 700 feet to the west to the twenty-one inch Downey-Bellflower Trunk Sewer in Clark Avenue.

Under Lakewood Boulevard, the westerly border of the site, there is a 21-inch sewer, called the Downey-Bellflower Trunk Sewer. This line begins north of the project site, continues adjacent to the site southerly along Lakewood Boulevard and southerly along Clark Avenue. A 15-inch Downey-Bellflower Relief Trunk Sewer, which collects wastewater from the area west of Clark Avenue, is located in Imperial Highway at Clark Avenue and connects to the 21-inch main trunk sewer at that point. The Downey-Bellflower Trunk Sewer collects wastewater from areas north, east, and west of the project site, including wastewater generated from the existing site. Wastewater is treated by either the Joint Water Pollution Control Plant in the City of Carson or the Los Coyotes Water Reclamation Plant in Cerritos. The County Sanitation Districts dispose of the effluent and solids from this 21-inch Trunk Sewer in compliance with the requirements set by the California Regional Water Quality Control Board. Although the City has a wastewater system adjacent to the site within Bellflower Boulevard, analysis of the existing on-site wastewater systems shows that the site wastewater drains southerly and westerly through a series of on-site wastewater lines to the 21-inch Trunk Sewer that lies within Lakewood Boulevard and Clark Avenue. This on-site system currently connects to the trunk sewer in Lakewood and Clark in as many as 12 separate locations.

Storm Drains

For a detailed discussion of the drainage patterns and storm drain system in the area, please refer to Section 3.4, Hydrology. In brief, proposed site drainage patterns affect the area that is tributary to the existing storm drain system in Imperial Highway and Bellflower Boulevard. The runoff from the proposed development will be collected by a system of catch basins, gutters, and drains, discharging off-site to the existing off-site storm drain system. The proposed development is modeled largely in parallel with the existing system. The general watershed areas and collection points or exit points from the site for a proposed condition model the existing condition. It is anticipated that the proposed development will construct new on-site storm drain facilities rather than try to utilize any existing on-site facilities. The proposed development should generally follow the existing site's drainage scheme of capturing the runoff at several locations discharging to an on-site storm drain and connecting to the existing storm drain system in the surrounding streets. The locations of the existing and proposed storm drains are shown in Figures 3.4-1 and 3.4-2.

Water

Domestic Water

The City of Downey uses groundwater to provide 100% of its potable water needs. The City's Water Division operates 21 groundwater wells, which pump the groundwater from the Central Groundwater Basin. Groundwater levels are maintained by the Central Basin Watermaster and the Water Replenishment District of Southern California. The City both owns and leases groundwater pumping rights, which allow the City to pump water from the Central Basin. Three connections to the Metropolitan Water District of California's (MWD) Feeder Main can be opened in an emergency to provide a backup supply of potable water.

MWD's 79-inch water main runs along the northeastern and northern boundary of the project site under Bellflower Boulevard and Stewart & Gray Road. The City of Downey's water system connects to this main line near the intersection of Lakewood Boulevard and Stewart & Gray Road. The City's water system includes a 16-inch water main in Stewart & Gray Road, 12-inch water line in Bellflower Boulevard, 6-inch and 10-inch water lines in Lakewood Boulevard, and 12-inch and 16-inch water lines in Imperial Highway. The City recently constructed a 20-inch domestic water transmission main in Lakewood Boulevard.

The on-site water system connects to the City of Downey public system on Stewart & Gray Road, Lakewood Boulevard, , and Bellflower Boulevard.

Reclaimed Water

The Central Basin Municipal Water District (CBMWD) supplies reclaimed water to portions of the City of Downey, and owns the infrastructure that carries the reclaimed water. CBMWD has two eight inch reclaimed water lines near the project site. The first line terminates on the east-side of Independence Park, just to the southeast of the project site. The second line is located on the southwest side of the project site and terminates just south of the intersection of Lakewood Blvd. and Clark Avenue, at the intersection of Lakewood Blvd. and Donovan Street. The site does not have any reclaimed water service connections at this time.

Fire Service Water

The site's existing fire system is connected to the City of Downey's public domestic water system. The project site has an existing network of water lines that serve the buildings and connect to the City of Downey water systems in Lakewood Boulevard, Bellflower Boulevard and Imperial Highway. Currently a 20-inch water line lies under Lakewood Boulevard, a 12-inch line under Bellflower Boulevard, and 8-inch to 10-inch lines under Imperial Highway. The onsite fire service system utilizes pump houses on-site to lift the on-site water pressure in the event that it drops below effective fire-fighting levels. The underground fire looped system is augmented by power pumps. However, both the on-site pumps and the power pumps are currently inoperational. The fire water service system lines have small "spiderweb cracks" that reduce the reliability of the system.

Solid Waste

Solid waste disposal service for the City of Downey is provided by the Calsan Disposal Company. The project area is serviced by the Downey Area Recycling and Transfer Station, F.R. Bowerman Landfill, and Puente Hills Landfill. The Downey Area Recycling Center (DART) is permitted for 5,000 tons per day (TPD), FR Bowerman Landfill is permitted for 8,500 TPD and the Puente Hills Landfill is permitted for 13,200 TPD.

Hazardous Waste

Hazardous waste disposal service for the current Kaiser Bellflower facility (used as a baseline for expected generation by the replacement Kaiser facility) is provided by either Thomas Gray & Associates, Inc., or Evergreen. The Kaiser Bellflower Hospital facility currently produces less than 220 pounds (0.11 tons) per month of hazardous waste, which consists of mercury, waste oil, reagents, and bulk chemotherapy products, and is considered a small hazardous waste generator. All hazardous waste handled by Thomas Gray & Associates is transported and disposed of out of state. Waste oil handled by Evergreen is transported to its Newark refinery, where it is recycled and processed.

Biohazardous waste produced by the Kaiser Bellflower facility is picked up by Steri-Cycle. Sharps are autoclaved at the Steri-Cycle facility and are then disposed of in area landfills. Waste to be incinerated, such as pharmaceutical, pathological, and trace biohazardous waste, is picked up by Steri-Cycle and transported to Chandler, Arizona. Kaiser also has an autoclave on site for sterilization of bandages and suction canisters, which are then picked up by Steri-Cycle and taken to area landfills. Total biohazardous waste produced by Kaiser Bellflower is approximately 10 tons per month.

Electricity

The primary electricity provider for the City of Downey is Southern California Edison. The site is currently served by a primary feeder line to a client-owned sub-station. Five 12,000-volt electrical lines feed into the site, two located in Lakewood Boulevard, two in Imperial Highway, and one in Bellflower Boulevard. Southern California Edison has provided a will-serve letter dated June 27, 2001, stating its readiness to install electrical distribution facilities within the proposed project.

Gas

The primary natural gas supplier for the City of Downey is the Southern California Gas Company. The site is serviced by 2-inch to 8-inch gas lines in Bellflower Boulevard, Imperial Highway, Stewart & Gray Road, Lakewood Boulevard, and Clark Avenue.

3.8.3 Regulatory Framework

City of Downey General Plan

Public service and utility improvements are constructed in accordance with plans and specifications meeting the approval of the City Engineer. All expanded utility lines are required to be constructed in coordination with service providers to ensure adequate and safe public infrastructure and public services for City residents. The cost of necessary utility infrastructure expansion is the responsibility of the applicants. The proposed project is expected to be consistent with the applicable General Plan Goals.

Southern California Association of Governments (SCAG)

The Southern California Association of Governments is the designated Municipal Planning Organization (MPO) that oversees regional planning in the Southern California Area. In its Comprehensive Regional Plans and Guide, it sets forth policies with respect to land use and transportation planning, and growth projections, among other regional issues. Specific relevant policies include:

Policy 3.05

Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.

Compliance

The proposed project is a redevelopment project, and will expand the existing utility and service infrastructure from the project site, where possible, as well as from the surrounding areas. Development of any type within the project site boundary would require the expansion of utility infrastructure. The project proposes commercial and business park, hospital, and medical office development, which is consistent with the site's designated Mixed-Use General Plan category. Therefore, the proposed project is consistent with this SCAG policy.

Policy 3.09

Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

Compliance

The proposed project represents redevelopment of a previously utilized site rather than new development, which minimizes cost of infrastructure and public service delivery. The cost of any necessary utility infrastructure expansion is the responsibility of the applicants. Therefore, the proposed project is consistent with this SCAG policy.

3.8.4 Thresholds of Significance

In general, project impacts on public services would be considered significant if project impacts exceed the capacity of existing or planned infrastructure or public service facilities. The criteria used for analysis of proposed project impacts to public services and utilities are listed below. The proposed project would have a significant impact if it would:

Schools

- Cause significant project-induced increase in population of school-age children in a public school district, contributing to an existing over-capacity problem.

Fire and Police Protection

- Require additional emergency response personnel and/or equipment to maintain acceptable levels of service, or if project-related development results in increased response times of service providers to a degree that would adversely impact public health and safety; or
- Interfere with emergency response or evacuation plans.

Storm Drains

- Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems.

Water

- Conflict with water conservation and supply requirements imposed by State and local agencies;
- Cause the substantial and adverse depletion of existing services of domestic water;
- Cause a water supply to be drawn from a groundwater basin that is overdrawn in relation to demand and historical levels; or
- Cause the construction of new water facilities beyond those already planned.

Wastewater

- Cause an increase in wastewater treatment that reaches or exceeds the current capacity or causes a reduction in the level of service, thereby requiring substantial expansion or development of new facilities; or
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Solid Waste

- Conflict with State and local requirements relating to source reduction, recycling, litter control, and solid waste handling; or
- Construction- or operation-related solid waste exceeds available capacities of landfills servicing the project area on a long-term basis.

Hazardous Waste

- Conflict with State and local requirements relating to source reduction and hazardous waste handling; or
- Operational-related hazardous waste exceeds available capacities of landfills servicing the project area on a long-term basis.

Other Services

- Conflict with applicable legal requirements relating to utilities; or
- Cause demand for utilities to exceed available capacity without providing expanded or additional facilities.

3.8.5 Impacts

Less Than Significant Impacts

Fire

The Downey City Fire Department has indicated that it has sufficient facilities and staff to accommodate the needs of the proposed projects. The 2000 census established the population of Downey at approximately 110,500 persons. The Downey Fire Department employs 69 uniformed personnel with a minimum daily suppression staffing of 21. Considering the station locations, the population density, and call volume, the Fire Department considers this an acceptable level of staffing.

The Downey Fire Department is staffed and equipped to handle a wide variety of emergencies, including structural fires, emergency medical calls, vehicle extrications, confined space rescue, urban search and rescue, swift water rescue, and other special emergencies that may arise. The Fire Department also has a mutual aid agreement with Santa Fe Springs and Vernon Fire Departments for a Hazardous Materials Response Team.

There is no one specific standard for evaluating acceptable service levels. The Downey Fire Department has been given a class 2 rating by the Insurance Services Office (ISO). The ISO collects information on a community's public fire protection and analyzes the data using the Fire Suppressing Rating Schedule (FSRS). They then assign a Public Protection Classification from 1 to 10. Class 1 represents the best public protection, and Class 10 indicates less than the minimum recognized protection. These ratings are used to set fire insurance premiums for residential and commercial properties.

The threshold standard for one engine company is 2,500 responses per year. Based on 1999 and 2000 data, the Downey Fire Department is well below this threshold level of service. Due to the current

on-site movie industry uses, additional Fire Department personnel have already been trained in pyrotechnics and specific fire suppression techniques, and the existing service ability is considered adequate to meet future needs of the proposed projects. Response times are approximately 4-6 minutes and are not expected to increase due to the proposed project. Actual driving time in the City is 3-4 minutes. The proposed project is located in close proximity to the first-in fire station, which will guarantee response times well below these averages.

The new Kaiser facility will increase the capacity for emergency care in the area. Kaiser proposes to build a hospital tower of up to eight stories, two four-story office buildings, and a six-story parking structure, which will require adequate water flow to the site and ladder trucks to respond to emergencies.

The Downey Fire Department currently has plans for expansion of the headquarters station facilities at 12222 Paramount Boulevard, expanding the emergency operations center. Plans are underway for remodel of fire station #3 at 9900 Paramount Boulevard as well. The Downey Fire Department has indicated that its equipment is sufficient to respond to the needs of the proposed project and therefore this impact is considered **less than significant**.

Solid Waste

According to the California Integrated Waste Management Board (CIWMB), a standard generation rate of 1 ton per person per year is used to estimate the quantity of solid waste expected under operation of the project. For commercial and business office uses, 9 persons per acre were assumed. 1,260 tons per year will be generated for Areas IIA, IIB, IIC, and IID and 74 tons will be generated per year for Area I. Approximately 874 tons of solid waste will be generated per year for the Kaiser facilities based on data from an established Kaiser Hospital site of similar size. The project would generate:

- Retail -- 74.8 tons per year (Downey Landing, LLC)
- Commercial / business park—1,260 tons per year (Downey Landing, LLC); 874 tons per year (Kaiser)

Total solid waste produced by the proposed projects is 2,209 tons per year. Existing permitted capacities for the landfills that service the proposed site total 26,700 tons per day. 2,209 tons per year equates to approximately 6 tons of solid waste from the proposed projects per day. The estimated waste generation is not anticipated to significantly impact solid waste services, although solid waste disposal is a significant regional issue, with the area's landfills expected to reach capacity in the near future, and this impact is considered **less than significant** on a project-specific level. However, implementation of mitigation measure 3.8-10 will further reduce the significance of this impact.

Hazardous Waste

The proposed Kaiser facility is anticipated to generate generic types of hazardous waste streams: medical (biohazardous) waste, radiological waste, and chemical waste. Average projected tonnage of hazardous and biohazardous waste based on data collected from the Kaiser Bellflower facility is 0.33 tons per day. Approximately 0.07 pounds of waste per day, including waste oil, mercury, and lab reagents, is generated by Kaiser Bellflower. Waste oil is recycled and refined by the designated hazardous waste handler. The remaining hazardous waste is transported out of state. Of the total biohazardous waste produced by Kaiser Bellflower per day, approximately 0.14 tons is disposed of by incineration out of state, not in local landfills. The remaining approximately 0.19 tons per day is treated and disposed of in local landfills. The addition of 0.19 tons per day into local landfills represents only .0007% of the total permitted daily capacity of the landfills. Therefore, this impact is **less than significant** on a project-specific level.

Wastewater

The project impacts on the capacity of the existing wastewater system are based upon correspondence with Ms. Ruth Frazen at the Sanitation District's Financial Planning and Property Management Section.

Since the site is currently under-utilized, implementation of the project may alter the amount of wastewater flow generated from the site. The proposed project is expected to connect directly to the 21-inch Downey-Bellflower Trunk Sewer. Since the existing parcel of land has been owned until recently by the federal government, the Sanitation District does not have any connection fee or other history to research historical flows from the site.

According to planning data supplied by the Sanitation District, it is estimated that the proposed project will generate wastewater flows as follows:

- Commercial and business park uses produce an average wastewater flow of 0.84 gallons per day per square foot (based on average loadings for restaurants, shopping centers, office buildings, warehousing uses, stores, and light industrial uses: Please refer to Table 3.8-2). The Downey Landing, LLC portion of the project (Areas I, II, and III) would be anticipated to produce a wastewater flow of approximately 450,990 gallons per day (0.45 mgd).
- The Kaiser medical office buildings and hospital facility would be anticipated to produce a wastewater flow of 242,000 gallons per day (.242 mgd).

The 21-inch trunk sewer has a design capacity of 3.4 to 4.7 mgd along the frontage of the project site. When last measured in 1993, when the site was in operation as a manufacturing facility, the actual sewer peak flow was 2.6 mgd. The 15-inch Downey-Bellflower Relief Trunk Sewer, which collects

wastewater from the west side of Clark Avenue, located in Imperial Highway at Clark Avenue connects to the 21-inch main trunk sewer and has a design capacity of 1.3 mgd. Wastewater flows from the Downey-Bellflower Trunk Sewer enter the Relief Trunk Sewer at Imperial Highway and Clark Avenue. Flow measured in 1998 at this entry point was 0.4 mgd. Total anticipated wastewater flow from the site is 0.70 mgd and there is adequate capacity remaining in both trunk sewers to handle the anticipated wastewater flows from the proposed project.

Within Imperial Highway there is an existing 8-inch sewer line that, according to the City, does not fully serve the frontage of the proposed Kaiser site. Since the proposed sewer line from the Kaiser site will be a 12-inch line, it is anticipated that a new line of at least 12-inch diameter will need to be constructed along Imperial Highway westerly from the proposed point of connection for the Kaiser site to the existing 21-inch Downey-Bellflower Trunk Sewer.

As stated in Section 3.8-2, the wastewater generated from this site will be treated by either the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson or the Los Coyotes Water Reclamation Plant (WRP) located in the City of Cerritos. The JWPCP design capacity is 385 mgd and is currently processing an average flow of 324.5 mgd (84% of capacity). The Los Coyotes Plant's design capacity is 37.5 mgd and the facility currently processes an average flow of 34.7 mgd (92.5% of capacity).

**TABLE 3.8-2
AVERAGE LOADINGS FOR VARIOUS LAND USE CATEGORIES**

<i>Description of Land Use</i>	<i>Flow (Gallons per day)/1,000 sq. ft.</i>	<i>COD¹ (Pounds per day)/1,000 sq. ft.</i>	<i>Suspended Solids (Pounds per day)/1,000 sq. ft.</i>
Shopping Center	325	3.00	1.17
Office Building	200	0.86	0.45
Professional Building	300	1.29	0.68
Restaurant	1,000	16.68	5.00
Indoor Theater	125	0.54	0.28
Financial Institution	100	0.43	0.23
Wholesale Outlet	100	0.43	0.23
Warehousing	25	0.23	0.09
Open Storage	25	0.23	0.09

¹ Chemical Oxygen Demand

Source: County Sanitation Districts of Los Angeles, Loadings for Each Class of Land Use, Table 1.

**TABLE 3.8-3
SUMMARY OF PROPOSED SEWER FLOW DEMANDS**

<i>Type of Use (Building Area)</i>	<i>Proposed Sewer Flow Demands</i>
Downey Landing, LLC Area 1—Shopping Center/Retail (410,000 sq. ft.)	133,250 gpd
Downey Landing, LLC Area IIA— Office/Flex Tech (444,500 sq.ft.)	88,900gpd
Downey Landing, LLC Area IIB — Office (243,000 sq. ft.)	48,640 gpd
Downey Landing, LLC Area IIC – Office (384,800 sq. ft.)	76,960 gpd
Downey Landing, LLC Area IID – Office (516,200 sq. ft.)	103,240 gpd
Area III- Kaiser Medical Buildings and Central Plant (292,700 + 27,300 sq. ft.),	87,810 gpd
Area III- Kaiser Hospital Tower (680,000 sq. ft.)	109,417 gpd
Area III- Museum/Learning Center (50,000 sq.ft.)	5,000 gpd
<i>Outflow total (all areas)</i>	653,217 gpd (.653217 mgd)

Source: County Sanitation Districts of Los Angeles County, Loadings for Each Class of Land Use, Table 1.

Based on these data, the existing infrastructure, operating at less than maximum capacity, could accommodate the anticipated wastewater flow from the proposed project. The additional demands of 0.65 mgd represents 1.2% of the remaining treatment facility capacity. Therefore, the proposed project would not be anticipated to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board or require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities and the impact is considered **less than significant**. The implementation of Mitigation Measure 3.8-2 will further reduce the significance of this impact.

Potentially Significant Impacts

Domestic Water

Project impacts on the capacity of the City domestic water system are based upon correspondence with Mr. Ralph Ewers at the City of Downey Building and Safety Department, along with Mr. Desi Alvarez and Mr. Brian Ragland of the City of Downey Public Works Department.

Impact 3.8-1:

The proposed project could result in a potentially significant impact to the City's domestic water system.

It is anticipated that the proposed project will generate additional demands for water as compared to the existing under-utilized site. Preliminary site utility requirements studies have indicated that for the Kaiser project, a 10-inch pipe will be required with a capacity of 1,580 gallons per minute. The City is currently reviewing the proposed master site plan and assisting with a determination of the projected domestic water demands for the Downey Landing, LLC portion of the site.

The City's summertime demand is nearing 95% of the production capacity of the groundwater production facilities (personal communication from Brian Ragland, Principal Civil Engineer, Public Works). More expensive MWD water is available in the event groundwater production is insufficient to meet total system demand. Acceptable service levels for the potable water system include meeting the maximum summertime demand and any additional demand for fire protection needs. The City has stated that additional long-term (yearly) demand resulting from the proposed development exceed current groundwater, imported, and reclaimed water capacity, the additional demand could be met by exercising a combination of four primary options:

- Lease additional groundwater rights each year,
- Purchase additional groundwater rights on a one-time basis,
- Purchase additional MWD water from CBMWD each year,
- Utilize reclaimed water at the development to offset all or a portion of new potable demand.

The City has stated that should this development require additional infrastructure the following must occur:

- Construction of new water wells and potable water infrastructure,
- Construction of additional MWD supply structures,
- Construction of new reclaimed water infrastructure.

The City has stated that in order to meet the peak summer and fire flow demands generated by this development, the following must occur:

- Construction of new water well(s) and potable water infrastructure.

The proposed project may require additional infrastructure to meet domestic water demand and therefore this impact is potentially significant. However, the implementation of Mitigation Measures 3.8-1, 3.8-2, 3.8-3, and 3.8-4 will mitigate Impact 3.8-1 to the City's domestic water system to a **less-than-significant** level.

Reclaimed Water

Project impacts on the capacity of the reclaimed water system servicing the City are based upon correspondence with Mr. Desi Alvarez and Mr. Brian Ragland of the City of Downey Public Works Department, as well as with Lucy McGovern of the Central Basin Municipal Water District.

Impact 3.8-2: **The proposed project will have a significant impact on the infrastructure of the reclaimed water system serving the City of Downey.**

The proposed project will generate additional demands for reclaimed water, since the existing site presently does not have any reclaimed water service available to it. It will be necessary to extend the existing reclaimed water line(s) to the site for landscaping and possible gray water uses inside and outside of the buildings, and possibly at Kaiser's Central Plant. Lines adjacent to the proposed site currently exist in Foster Road, Bellflower Boulevard, and in Lakewood Boulevard just south of the Lakewood and Clark intersection at Donovan Street. The Central Basin Municipal Water District (CBMWD) is responsible for construction and maintenance, and owns the reclaimed water infrastructure up to the water meter. Any extension of the reclaimed water lines should be discussed with the City and CBMWD.

Anticipated reclaimed water usage demand rates for landscaping can be estimated by type of coverage, area of coverage, and precipitation data for the site location. As a general rule, coverage area for landscaping for commercial/office projects is 10% of land area. Based upon a 160-acre site,

and therefore 16 acres of landscaped area, the site will generate a reclaimed water demand load for landscape of approximately 41 acre-feet per year (2.5 acre-feet per acre of landscape).

The Central Municipal Water Basin has indicated that currently supply of reclaimed water exceeds demand. Therefore, increased demand by the proposed project for reclaimed water would have a less-than-significant impact on the City's reclaimed water supply. However, as the site is not currently served by reclaimed water lines, additional infrastructure is required to provide reclaimed water to the site, which is a potentially significant impact. The implementation of Mitigation Measures 3.8-5 to 3.8-7 will mitigate Impact 3.8-2 to the Central Basin Municipal Water District's reclaimed water system and the City's reclaimed water service and availability to a **less-than-significant** level.

Fire Service Water

Project impacts on the capacity of the City reclaimed water system are based upon correspondence with Mr. Desi Alvarez and Mr. Brian Ragland of the City of Downey Public Works Department, as well as Deputy Fire Marshal Robert Rowe of the Downey Fire Department.

Impact 3.8-3: It is anticipated that the proposed project will generate additional demands for fire service water as compared to the existing under-utilized site.

Project impacts on the capacity of the City water system to handle the on-site fire service are based upon correspondence with Deputy Fire Marshal Robert Rowe of the City of Downey Fire Department and Mr. Desi Alvarez and Brian Ragland of the City of Downey Public Works Department.

The City Fire Department has reviewed the existing conditions of the project to ascertain the ability of the existing system to maintain sufficient coverage for the current usage of the site. Currently a 20-inch water line lies under Lakewood Boulevard, a 12-inch line under Bellflower Boulevard, and 8-inch to 10-inch lines under Imperial Highway. Further fire flow testing specific to the site is required to determine the adequacy of the water flow and pressure to the project site.

Based upon initial review of the current conditions and age of the existing private system, the Fire Department recommends that the on-site system be abandoned. The underground fire looped system augmented by power pumps is old and there are potential underground leaks. The proposed water

system should be designed utilizing existing pressure flows available to the site from adjacent streets

As the existing on-site fire system is inadequate to accommodate the fire water demand for the proposed project, this impact is potentially significant. The implementation of Mitigation Measures 3.8-8 to 3.8-9 will mitigate on-site fire service Impact 3.8-3 to the City's water system and the Downey Fire Department to a less-than-significant level. These mitigation measures will ensure that all onsite fire service water will be interconnected with available City water sources around the project site.

Electricity

Impact 3.8-4: It is anticipated that the proposed project will generate additional demands for electricity as compared to the existing under-utilized site.

Under current conditions, the site is potentially served by five 12,000-volt electrical lines. Build-out of the proposed project will generate increased demands for electricity. Table 3.8-4 summarizes average electricity usage for various uses per square foot per day.

**Table 3.8-4
Average Electricity Demand**

Use	kV/ Sq. ft.	Proposed # sq. ft.	Anticipated demand (kV- amps/day)	Project applicant
Large office building (>30,000 sq.ft.)	.005	516,200 292,700	5,603 1,464	Downey Landing, LLC Kaiser
Large commercial/retail	.0145	410,000	5,945	Downey Landing, LLC
Small commercial /restaurant	.0205	50,000	1,025	Downey Landing, LLC
Hospital	.007	680,000	4,760	Kaiser
Parking structure/warehouse	.001	600,000	600	Kaiser
Light industrial/sound stage	.010	1,120,530 27,300	11,205 273	Downey Landing, LLC Kaiser
Total		3,696,730	30,875	

Source: Southern California Edison, 2001

For the purpose of providing a conservative analysis, the electricity demand calculations assumed buildout of Option 1, as reuse of current buildings for studio production would require more energy than Option 2, which proposes more business and technology park uses. The proposed projects (Downey Landing, LLC and Kaiser) will each demand greater than 500 kV-amps per day based on total square footage. The Downey Landing, LLC portion of the project (Areas I, IIA, IIB, IIC, and IID) will conservatively demand greater than 23,778, kV-amps per day of electricity. Preliminary utility requirement studies have indicated that two separate 66 kV utility company services, each served from separate utility company substations and from separate routes, will be required for the Kaiser portion of the project, which is expected to demand approximately 7,097 kV-amps per day. Specific locations of these substations must be determined.

The proposed project would require installation of additional infrastructure to provide for the electricity demands of the project, which is a potentially significant impact. In addition, in view of the current California energy crisis, additional electricity demands from the proposed project create a potentially significant impact. However, the implementation of mitigation measure 3.8-10 by each applicant will mitigate Impact 3.8-4 to the Edison electrical system to a **less-than-significant level**.

Gas

Impact 3.8-5: It is anticipated that the proposed project will generate an increased demand for natural gas.

The site is served by 8-inch gas lines on Imperial Highway, 4-inch gas lines on Lakewood Boulevard and Clark Street, and 2-inch lines on Stewart & Gray Road, Bellflower Boulevard, and peripheral streets. Adequacy of the existing infrastructure for the proposed project will depend on consumption data per land use. Estimates of gas usage for non-residential projects are developed on an individual basis by the Gas Company. The proposed project's increased demand for natural gas is a potentially significant impact. The implementation of mitigation measure 3.8-11 will reduce the impact of increased natural gas use as a result of the proposed project to a **less-than-significant level**.

Schools**Impact 3.8-6:**

It is anticipated that the proposed project will generate an additional demand for schools that are already overcrowded.

A project of the magnitude proposed would affect existing overcrowding at the various school sites serving the Downey area. The completed project would generate greater economic opportunities in the City, thereby attracting new residents to Downey. Many of the retail and smaller businesses tend to attract younger employees, who are within the national average (ages 20-35) of starting families or with school-age children.

Natural population growth in the Southern California area has been affecting increased enrollments at the elementary level for the past ten years. As population growth continues and students progress to the middle and high school sites, enrollments continue to grow district-wide, increasing overcrowding situations. This trend is predicted to continue, presenting not only problems with overcrowding at specific sites, but also land availability for placing relocatable classrooms at sites.

The Downey School District is currently in the process of evaluating and/or implementing major modernization projects and future growth needs are being considered. School and park uses are prohibited without further environmental review and clearance, but the City is prepared to reserve an eight-acre parcel for school and park uses, subject to attainment of necessary approvals through a separate planning and environmental review process.

The Downey School District currently has a policy of allowing children of persons employed in the City of Downey to attend District schools on a permit basis, as space permits. Due to the current overcrowding at District schools, issuance of inter-district attendance permits will likely be severely restricted.

Further, as discussed in Section 3.7 (Population and Housing), the proposed project would not create a demand for housing units that cannot be met by existing or planned residential development, and would not create a demand for housing that is significantly above what is projected for in adopted City plans and policies. Based on conservative employment generation rates for the uses proposed, the project would generate approximately 7,100 jobs for the Downey Landing, LLC development and approximately 2,437 employees for the Kaiser facility. However, the proposed Kaiser portion of the project is

a replacement facility for the current Bellflower location, and it is assumed that current employees would commute to the proposed facility, and therefore, will not create additional housing demands, and are unlikely, given the proximity of Bellflower to Downey, to move school-age children to schools in Downey. The future use of the existing Kaiser Bellflower facility remains unknown until approximately 2008, when the replacement facility is expected to be substantially completed.

In addition, the proposed project is consistent with planned development in the City, and was assumed in the General Plan Land Use and Housing Chapters. In response to the 2000 Census, the City is revising the Housing Chapter and the revised Chapter will also reflect development and housing need projections based on implementation of the proposed project. All employees anticipated with the proposed project would not necessarily reside within the City of Downey, though the percentage cannot be predicted. The proposed project would not introduce growth that was not accounted for in the General Plan Land Use and Housing Chapters, and therefore would not result in unforeseen housing demands, which would in turn result in increased demands for schools. With the implementation of mitigation measure 3.8-12, this impact would be reduced to a **less-than-significant** level.

Police

Impact 3.8-7:

It is anticipated that the proposed project will generate an additional demand for police protection.

The Downey Police Department, which has one centrally located station, has divided the City into flexible quadrants (based on daily staffing levels) assigned at least one officer and patrolled by officers on a continual basis. There are no specialized programs in place that would specifically impact the project site. Downey patrol officers are supplemented by traffic enforcement officers and detective personnel. The Downey Police Department is staffed with 115 sworn officers, creating a service ratio of 1.07 officers per thousand residents. While this personnel-to-population ratio would likely be considered somewhat low for the industry as a whole, the Downey Police Department has indicated that it currently provides satisfactory and adequate levels of service. Response times to 9-1-1 calls are expected to be less than two minutes.

Despite the anticipated inclusion of on-site private security for the proposed project, both during construction and operation, increased demand on the Downey Police Department for protection and crime prevention services is anticipated as a result of the size of the proposed project. The Downey Police Department has indicated that its resources are limited and the proposed project could result in a potentially substantial impact to police services by increasing the service burden placed on the DPD. Implementation of Mitigation Measures 3.8-13 and 3.8-14 is anticipated to reduce the impacts of the proposed project to a **less-than-significant** level.

Storm Drains

Please see Section 3.4, Hydrology, for a detailed discussion of the potentially significant impact of the proposed project on storm drains.

Significant Unavoidable Impacts

There are no significant unavoidable impacts anticipated to result from the proposed project.

3.8.6 Cumulative Impacts

Infrastructure capacity for utilities and other public services is a regional problem due to recent and projected population increases in the Southern California area. This population increase creates additional demand for public services, which may already be at or near capacity. It has been determined that, with implementation of recommended mitigation measures, all project-specific impacts to public services can be reduced to a less-than-significant level. The Lead Agency has consequently determined that the contribution of the proposed project to cumulative public services impacts in the Los Angeles County Southeast Subregion (Gateway Cities Subregion) would be less than cumulatively considerable.

Schools

The proposed project is anticipated to result in a slight overall increase in resident population in the City of Downey, and would impact schools in the Downey Unified School District. However, these impacts would be mitigated to a less-than-significant level. Further, as stated in Section 3.7 (Population and Housing), this increase does not exceed what was assumed in the General Plan. Further, as stated in Chapter 2 (Project Description) and in Section 3.7, the proposed project is intended partially as a replacement facility (Kaiser), and also to recapture jobs lost with the closure of the NASA site, and out-migration of employment in general. Lastly, the City proposes to offer to the Downey Unified School District, on a first-refusal basis, a portion of the project site upon which to build a new elementary school, pending a separate environmental review process and oversight by appropriate agencies. Therefore, when considered in conjunction with the total

approved/pending major development projects in the City, the proposed project would not make a cumulatively considerable contribution to school overcrowding in the region.

Wastewater

The proposed project could result in a potentially significant impact to the City and County Sanitation District's wastewater system. Based on current data, the anticipated wastewater flow from the proposed project can be adequately handled by the existing conveyance infrastructure. Additionally, the proposed project should not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, nor require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities. The project's demand is within previously anticipated growth projections. The proposed project would make a less-than-significant contribution to the cumulative impacts on wastewater capacity and wastewater treatment capacity in the Gateway Cities Subregion. **Water**

The proposed project could result in a potentially significant impact to the City's domestic water system. It will also have a significant impact on the existing reclaimed water system in the City of Downey; however, the impact on the reclaimed water system is not demand-related, but infrastructure-related, and the proposed mitigation measures for the project would provide for the infrastructure necessary to serve the project site.

It is anticipated that with implementation of mitigation measures as outlined below, the project-specific impact on the City's domestic water system, as well as the Central Basin Municipal Water District's reclaimed water system, will be reduced to a less-than-significant level. Further, with the proposed use of reclaimed water for landscape irrigation and possibly other non-potable uses, the proposed project would substantially reduce its water usage. The project would, therefore, not make an incremental contribution to the cumulative impacts on domestic water in the Gateway Cities Subregion.

Solid Waste

The estimated solid waste generation by the proposed projects is anticipated to result in an overall increase in the amount of solid waste for Downey and Los Angeles County, resulting in cumulative impacts. Implementation of Mitigation Measure 3.8-11 is recommended to reduce the volume of solid waste that is transported to the local landfills, which will reduce this impact to a less-than-significant level on a project level. Employers shall implement recycling programs and install appropriate trash compactors to reduce the amount of solid waste going to landfills. The service provider has indicated that current landfill capacity is adequate to accommodate the proposed projects' solid waste disposal needs. The proposed project would make a less-than-significant contribution to the cumulative impacts on the capacity of area landfills.

Hazardous Waste

The proposed Kaiser hospital facility will generate hazardous and infectious waste in the course of its normal operations. This hazardous waste will be disposed of per federal, state, and local regulations. However, generation of hazardous waste is anticipated to have a long-term cumulative impact on capacity of disposal sites. Hazardous waste is treated by hazardous waste handlers and either incinerated or disposed of in area landfills. The hazardous waste service provider anticipates that landfill capacity is adequate to meet projected demands. The proposed project would make a less-than-significant contribution to the cumulative impacts on the capacity of area landfills.

Electricity

The proposed project will create an ongoing demand for increased electricity during operations. This is a potentially significant impact given the severity of the current electricity crisis in California. Since the shortage of electricity is most likely short-term, the proposed project is anticipated to make a less-than-significant contribution to the cumulative impacts on electricity demand.

Gas

The proposed project will create an ongoing demand for increased natural gas during operations. The service provider anticipates that, with implementation of Mitigation Measure 3.8-11, gas supply and infrastructure are adequate to meet projected demands and that no foreseeable short- or long-term cumulative impacts to natural gas are anticipated as a result of the proposed project.

Fire Protection Services

Since the anticipated call load could be absorbed by the existing system, the proposed projects would not themselves create an immediate cumulative impact on fire protection, emergency response, or transport services. However, the Downey Fire Department anticipates that this project, in combination with the continued growth of Downey, would eventually result in need for additional personnel, equipment, and facilities in order to accommodate both day-to-day service demands and large-scale emergencies such as earthquakes, even assuming the project's fair share of citywide mitigation measures and funding requirements. The project's contribution to this eventual need would be less than significant.

Police Services

The Downey Police Department (DPD) does anticipate that significant cumulative impacts on their ability to provide an acceptable level of service to the City in the long term would occur with the proposed project, in conjunction with the continued growth of the City of Downey as a whole. The DPD has indicated that this project, in conjunction with the inevitable growth of Downey, would require the eventual need for additional personnel and equipment to accommodate current response

3.9 Transportation and Traffic

3.9.1 Introduction

This section provides a summary of the results of a traffic impact analysis that was conducted for the project by Stevens-Garland Associates. The methodology for the traffic study, in general, was to 1) establish the existing baseline traffic conditions at the potentially affected intersections in the study area, 2) develop future baseline traffic conditions by considering the results of regional growth and the cumulative traffic impacts of other development projects in the area, 3) estimate the level of additional traffic that would be generated by the proposed project, 4) conduct a comparative analysis of traffic conditions with and without the project, 5) assess the parking impacts, and 6) identify potential mitigation measures.

The intersection analysis is based on weekday peak hour traffic conditions at 20 intersections in the project vicinity. The analysis of the access/circulation system is based on a review of the proposed site plan in context with the existing layout of the local street network.

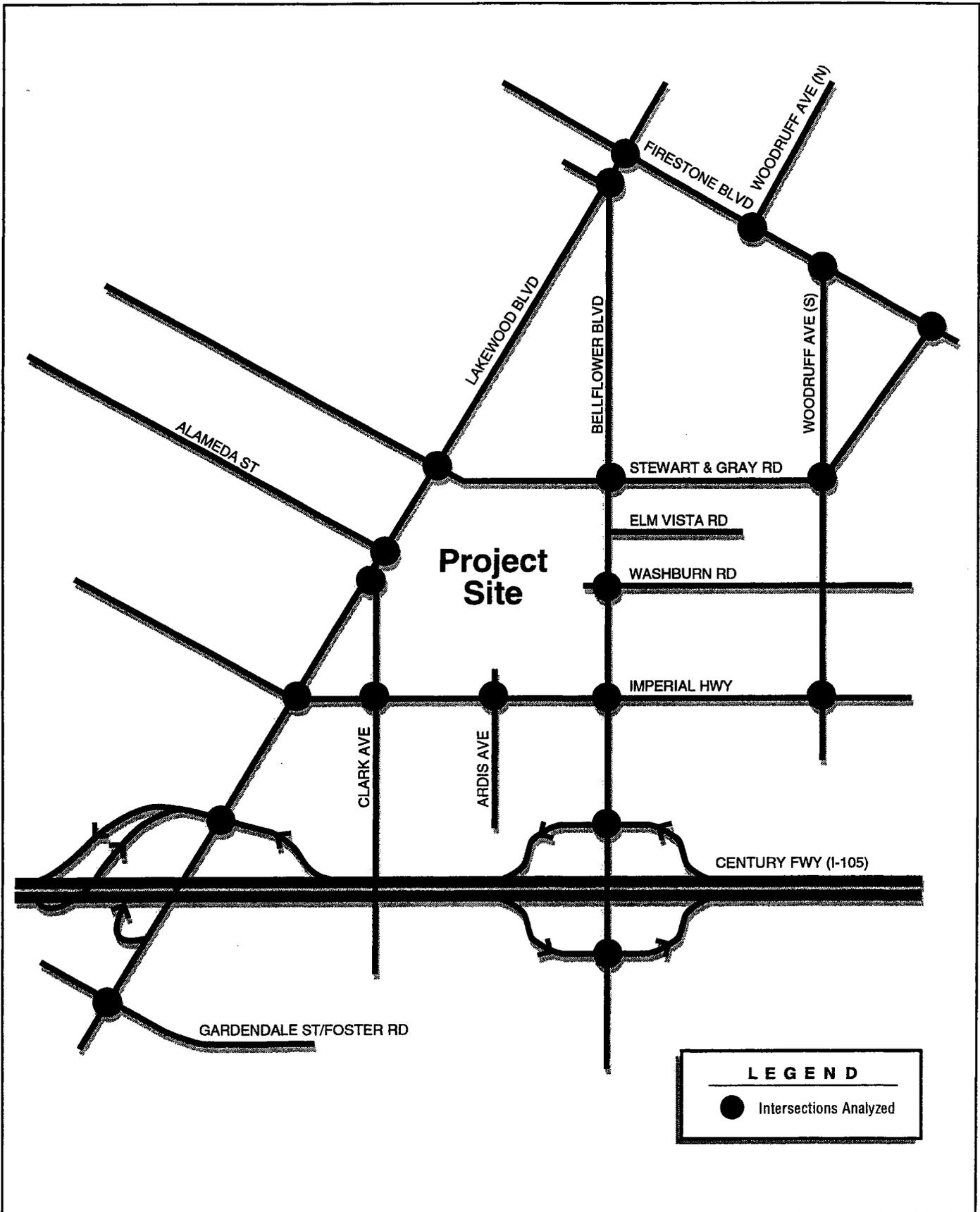
3.9.2 Existing Conditions

The street network in the project vicinity, the existing traffic volumes, and the levels of service at the affected study area intersections are described below. The study area street network and the location of the intersections that were analyzed are illustrated on Figure 3.9-1.

Street Network

Regional access to the project area is provided by the Century Freeway (I-105), which is located approximately one-quarter mile south of the project site, the San Gabriel River Freeway (I-605), which is located approximately one mile east of the project site, and the Santa Ana Freeway (I-5), which is located approximately two miles northeast of the project site. Within the project vicinity, the Century Freeway has interchanges at Lakewood Boulevard and Bellflower Boulevard, the I-605 Freeway has interchanges at Imperial Highway and Firestone Boulevard, and the Santa Ana Freeway has an interchange at Lakewood Boulevard.

The streets that provide direct access to the project site are Lakewood Boulevard, Stewart & Gray Road, Bellflower Boulevard, Imperial Highway, and Clark Avenue. Lakewood Boulevard is a four lane north-south arterial street that abuts the northwest side of the project site. Stewart & Gray Road is a four lane east-west street that abuts the north side of the project site. Bellflower Boulevard is a four lane north-south arterial street that abuts the east side of the project site. Imperial Highway is a six lane east-west arterial street that abuts the south side of



Not to Scale



10552-00



**Study Area
Roadway Network**

FIGURE 3.9-1

SOURCE: Stevens/Garland Associates

City of Downey

the project site. Clark Avenue is a four lane north-south street that abuts the west side of the project site.

Other streets that serve as access routes to the project area are Firestone Boulevard, Woodruff Avenue, Washburn Road, Alameda Street, and Ardis Avenue. The number of travel lanes and the speed limits on the study area roadways are shown in Table 3.9-1.

**TABLE 3.9-1
TRAVEL LANES AND SPEED LIMITS ON STUDY AREA ROADWAYS**

Roadway/Segment	# of Lanes	Speed Limit
Lakewood Boulevard	4/(6 with peak period restrictions)	40
Stewart & Gray Road	4	35 west of Lakewood 40 east of Lakewood
Bellflower Boulevard	4	40
Imperial Highway	6	40
Clark Avenue	4	35
Firestone Boulevard	6	35 west of Lakewood 40 east of Lakewood
Woodruff Avenue	4	35 north of Firestone 40 south of Firestone
Washburn Road	2	25
Alameda Street	2	25
Ardis Avenue	4	25

Twenty intersections in the project vicinity have been analyzed for this traffic study. All of these intersections are signalized except for the intersection of Bellflower Boulevard and Washburn Road, which has a stop sign on Washburn Road. The Firestone/Lakewood intersection is a designated monitoring location for the Los Angeles County Congestion Management Program (CMP). The intersections that were evaluated are listed below.

- Lakewood Boulevard at Firestone Boulevard
- Lakewood Boulevard at Bellflower Boulevard
- Lakewood Boulevard at Stewart & Gray Road
- Lakewood Boulevard at Alameda Street
- Lakewood Boulevard at Clark Avenue
- Lakewood Boulevard at Imperial Highway
- Lakewood Boulevard at I-105 on/off ramps
- Lakewood Boulevard at Gardendale Street/Foster Road
- Bellflower Boulevard at Stewart & Gray Road
- Bellflower Boulevard at Washburn Road
- Bellflower Boulevard at Imperial Highway
- Bellflower Boulevard at I-105 westbound on/off ramps

- Bellflower Boulevard at 1-105 eastbound on/off ramps
- Imperial Highway at Clark Avenue
- Imperial Highway at Ardis Avenue
- Firestone Boulevard at Woodruff Avenue (East)
- Firestone Boulevard at Woodruff Avenue (West)
- Firestone Boulevard at Stewart & Gray Road
- Woodruff Avenue at Stewart & Gray Road
- Woodruff Avenue at Imperial Highway

Existing Traffic Volumes

The morning and afternoon peak period traffic volumes at 14 of the 20 study area intersections were counted on Tuesday and Wednesday, March 20 and 21, 2001. Manual turning movement counts were taken at 15-minute intervals from 7:00 to 9:00 a.m. and from 4:00 to 6:00 p.m. The peak hour traffic volumes at each intersection were then determined by calculating the highest one-hour interval of traffic flow during each time period. Traffic counts for two of the intersections, Firestone at Woodruff east and Firestone at Woodruff west, were obtained from a traffic study that was conducted for the Sears Auto Center and reflect counts that were taken in January 2001. Traffic counts for four of the intersections; Lakewood/Gardendale, Firestone/Stewart & Gray, Woodruff/Stewart & Gray, and Woodruff/Imperial; were taken on Wednesday, June 27, 2001. The peak hour traffic volumes and turning movements at each of the study area intersections are shown in the Appendix.

Intersection Levels of Service

To quantify the existing traffic conditions, the study area intersections were analyzed to determine their operating conditions during the weekday morning and afternoon peak periods. Based on the peak hour traffic volumes, the turning movement counts, and the existing number of lanes at each intersection, the intersection capacity utilization (ICU) values and levels of service (LOS) have been determined at each intersection.

The ICU value is a measure of an intersection's traffic volumes as compared to the theoretical capacity of the intersection. Level of service is a qualitative indicator of an intersection's operating conditions, which is used to represent various degrees of congestion and delay. It is measured from LOS A (excellent conditions) to LOS F (extreme congestion), with LOS A through D typically considered to be acceptable. The relationship between ICU values and levels of service and a brief description of each level of service are shown in Table 3.9-2.

**TABLE 3.9-2
RELATIONSHIP BETWEEN ICU VALUES AND LEVELS OF SERVICE**

ICU Value	Level of Service	Traffic Conditions
0 to 0.600	A	EXCELLENT - Little or No Congestion or Delays
>0.600 to 0.700	B	VERY GOOD - Occasional Congestion & Delays
>0.700 to 0.800	C	GOOD - Moderate Congestion & Delays
>0.800 to 0.900	D	FAIR - Substantial Congestion & Delays
>0.900 to 1.000	E	POOR - Excessive Congestion & Delays
>1.00	F	FAILURE - Extreme Congestion & Delays

The existing ICU values and levels of service at the 20 study area intersections are summarized on Table 3.9-3.

**TABLE 3.9-3
EXISTING INTERSECTION LEVELS OF SERVICE**

Intersection	ICU Value & Level of Service	
	AM Peak Hour	PM Peak Hour
Lakewood/Firestone	1.050 - F	1.141 - F
Lakewood/Bellflower	0.819 - D	0.734 - C
Lakewood/Stewart & Gray	0.872 - D	0.847 - D
Lakewood/Alameda	0.588 - A	0.616 - B
Lakewood/Clark	0.703 - C	0.659 - B
Lakewood/Imperial	0.775 - C	0.937 - E
Lakewood/I-105 Ramps	0.716 - C	0.714 - C
Lakewood/Gardendale-Foster	0.648 - B	0.662 - B
Bellflower/Stewart & Gray	0.672 - B	0.609 - B
Bellflower/Washburn	0.666 - B	0.441 - A
Bellflower/Imperial	0.909 - E	0.828 - D
Bellflower/I-105 WB	0.581 - A	0.494 - A
Bellflower/I-105 EB	0.631 - B	0.481 - A
Imperial/Clark	0.656 - B	0.684 - B
Imperial/Ardis	0.488 - A	0.509 - A
Firestone/Woodruff (W)	0.703 - C	0.681 - B
Firestone/Woodruff (E)	0.653 - B	0.738 - C
Firestone/Stewart & Gray	0.724 - C	0.731 - C
Woodruff/Stewart & Gray	0.612 - B	0.637 - B
Woodruff/Imperial	0.711 - C	0.743 - C

3.9.3 Regulatory Framework and Consistency

Southern California Association of Governments

Regional Transportation Plan (RTP)

The RTP has goals, objectives, policies, and actions pertinent to the proposed project. The RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. The following policies were identified by SCAG as relevant to the proposed project.

Policy 4.01

Transportation investments shall be based on SCAG's adopted Regional Performance Indicators, which include mobility, accessibility, environmental concerns, reliability, safety, access for livable communities, equity among population groups, and cost-effectiveness.

Consistency

The project is consistent with this policy because it has been designed to have an access and circulation system that enhances mobility, safety and accessibility in context with the surrounding street network and because a program of mitigation measures would be implemented at locations that would be significantly impacted.

Policy 4.02

Transportation investments shall mitigate environmental impacts to an acceptable level.

Consistency

The project is consistent with this policy because there would be an obligation to improve the transportation infrastructure at any location projected to operate at unacceptable conditions at which the project would result in a significant impact.

Policy 4.04

Transportation control measures shall be a priority.

Consistency

The project is consistent with this policy because appropriate traffic control measures have been incorporated into the design of the site's access and circulation system.

Policy 4.16

Maintaining and operating the existing transportation system will be a priority over expanding capacity.

Consistency

The project is consistent with this policy because the proposed development has been designed to utilize the existing roadway system to the maximum extent possible relative to local and regional access.

City of Downey

General Plan Circulation Element

The purpose of the General Plan Circulation Element is to provide a strategy for developing a transportation system that is consistent with the anticipated land use projections within the General Plan area. The following policies and programs were identified as relevant to the proposed project.

Policy 2.1.1

The City shall promote traffic safety by improving the level of service on major streets, where possible.

Program 2.1.1.1

The City shall maintain intersection service levels of major streets at "E" or better, excepting those intersections currently operating at Level of Service "F".

Consistency

The project is consistent with this program because mitigation measures have been proposed that would improve the level of service at any intersection projected to operate at LOS E or F that would be significantly impacted by the project.

Program 2.1.2.2

Support the use of non-vehicle improvements to reduce peak-hour congestion and to reduce vehicle miles traveled.

Consistency

The project is consistent with this program because the diverse mix of uses within the development and the provision of internal linkages throughout the site would encourage internal vehicle and pedestrian trips among the project components, which would thereby reduce peak hour congestion and vehicle miles traveled.

Program 2.1.1.4

Pursue implementation of development fees to require new developments and expansions of existing developments to pay the cost of circulation improvements needed to serve them.

Consistency

The project is consistent with this program because the project applicant would be required to either implement the circulation improvements needed to mitigate the project's significant traffic impacts or to contribute to a fair-share funding program that would be used to implement improvements at the affected locations.

Policy 2.2.1

The City shall pursue the standard for transportation corridors within the City that correlate with land use demands.

Program 2.2.1.1

The City shall identify and concentrate land uses with high traffic generation near major transportation corridors and public transit facilities.

Consistency

The project is consistent with this program because the project would be located adjacent to several major arterial roadways and within a half-mile of the Century Freeway (I-105).

Policy 2.7.1

The City shall encourage walking and bicycling as attractive alternatives to vehicular transportation.

Program 2.7.1.1

The City shall establish bicycle trails and pedestrian walkways within the proximity of compatible residential, commercial and industrial areas, and link them with other open space and recreational areas.

Consistency

The project is consistent with this program because the Specific Plan area is being designed to have internal pedestrian/bicycle linkages to provide the opportunity for employees and patrons to access and travel within the site via modes other than the automobile.

3.9.4 Thresholds of Significance

Based on the City of Downey criteria, the proposed project would have a significant traffic impact if it would:

- Increase the ICU value by 0.02 or more at an intersection operating at LOS E or F, or
- Result in a decrease from LOS A, B, C, or D to LOS E or F at an affected intersection.

For intersections at the end of the I-105 freeway ramps, which are operated by Caltrans, the criteria state that the project would have a significant impact if it would increase the ICU value by 0.02 at an intersection operating at LOS F.

The project would have a significant parking impact if the number of spaces provided for the project were less than the number of spaces required to accommodate the anticipated demands of the proposed uses.

The project would have a significant impact relative to site access and circulation if the project would result in circulation conflicts, a substantial disruption to existing circulation patterns, and/or a substantial increase in safety risk.

3.9.5 Impacts

The following sections summarize the analysis of the project's impacts on study area traffic conditions. First is a discussion of project-generated traffic volumes. This is followed by a description of the future baseline traffic conditions without the project. Then an analysis is presented of the project's impacts on intersection levels of service at the affected study area intersections. The impacts are evaluated individually as well as combined for the Downey Landing, LLC commercial/retail/office development and the Kaiser development. The anticipated traffic and parking impacts during construction are also addressed.

Project-Generated Traffic

The volume of traffic expected to be generated by the proposed development was determined in order to estimate the impacts of the project on the study area streets and intersections. Table 3.9-4 shows the estimated volumes of project-generated traffic for an average day and for the morning and afternoon peak hours for each of the two project scenarios for the Downey Landing, LLC commercial development. Option 1 represents the scenario where the existing Building 1 is included in the project as motion picture studio and production space. Option 2 represents the scenario where Building 1 is mostly demolished and replaced with technology/business park/research and development (R&D) uses.

The trip generation rates for each land use (vehicle trips per 1,000 sq. ft. of gross floor area) represent the average rates cited in the Institute of Transportation Engineers *Trip Generation* manual (6th Edition, 1997), with the following exceptions. The trip levels for the office, retail, and technology/R&D uses were estimated by using the fitted curve equations from the *Trip Generation* manual, as shown below. The trip rates used for the motion picture studio and production space were developed from empirical data collected at existing studios. The traffic volumes used for the park/open space component represent an estimate of patronage from outside users; i.e., people who are not on-site for any of the other uses.

Retail	AM Peak Hour	$\text{Ln}(T) = 0.596 \text{Ln}(X) + 2.329$
	PM Peak Hour	$\text{Ln}(T) = 0.660 \text{Ln}(X) + 3.403$
	Average Daily	$\text{Ln}(T) = 0.643 \text{Ln}(X) + 3.654$
Office	AM Peak Hour	$\text{Ln}(T) = 0.797 \text{Ln}(X) + 1.558$
	PM Peak Hour	$T = 1.121 (X) + 79.295$
	Average Daily	$\text{Ln}(T) = 0.768 \text{Ln}(X) + 3.654$
R & D	AM Peak Hour	$\text{Ln}(T) = 0.875 \text{Ln}(X) + 0.883$
	PM Peak Hour	$\text{Ln}(T) = 0.832 \text{Ln}(X) + 1.060$
	Average Daily	$\text{Ln}(T) = 0.824 \text{Ln}(X) + 3.135$

Where: T = number of vehicle trips
 X = floor area in 1,000 sq. ft.
 Ln = natural logarithm

Table 3.9-4 indicates that Option 1 (with Building 1 as studio/production space) would generate an estimated 1,450 vehicle trips during the morning peak hour (1,170 in and 280 out), 2,290 trips during the afternoon peak hour (770 in and 1,520 out), and 22,600 trips throughout a 24-hour day. Option 2 (without Building 1) would generate an estimated 2,040 trips during the morning

peak hour (1,660 in and 380 out), 2,680 trips during the afternoon peak hour (800 in and 1,880 out), and 23,860 trips throughout a 24-hour day. As Option 2 has the higher trip generation estimates during the peak periods, the traffic impact analysis is based on this development scenario. These traffic volumes reflect the assumption that an estimated 25 percent of the traffic generated by the retail center would be comprised of passby trips; i.e., motorists who are already traveling on the street network who decide to stop at the center while passing by the site. It has also been assumed that about 5 percent of the traffic during the AM peak hour and 10 percent of the PM peak hour and daily traffic would be comprised of internal trips among the various land uses within the site.

The trip generation characteristics for the proposed Kaiser development are shown in Table 3.9-6. The trip generation rates represent the average rates from the *Trip Generation* manual. As shown, the medical complex is projected to generate 1,397 vehicle trips during the morning peak hour (1,070 in and 327 out), 1,722 trips during the afternoon peak hour (445 in and 1,277 out), and 22,450 trips throughout a 24-hour day.

Updated Project Site Plan Analysis

On February 8, 2002 an updated site plan was produced for the project area and new trip generation analysis (Tables 3.9-5, 3.9-7, and 3.9-8) has been conducted for the FEIR to determine if the trip generation characteristics of the land use mix most recently proposed for the Downey Landings project would be comparable to the scenario that was evaluated in the DEIR. Table 3.9-5 compares the volumes of site-generated traffic for the DEIR scenario, the newly proposed Option 1, and the newly proposed Option 2. Table 3.9-7 shows the updated traffic generation for the Kaiser portion of the site. While there were two options presented in the DEIR, Option 2 was evaluated in detail because it had the higher traffic generation characteristics. As shown in Table 3.9-5 and 3.9-8, the newly proposed options would generate traffic volumes that are approximately equal to or slightly less than the scenario that was evaluated in the DEIR. The traffic impacts identified in the DEIR would, therefore, be applicable to the new scenarios and the new scenarios would not result in any additional traffic impacts. The traffic volumes in Table 3.9-8 represent the sum of all components of the Specific Plan project, including the Downey Landing LLC, the Kaiser component, the studio/production component (for Option 1), and/or the technology/R & D component (for Option 2).

**TABLE 3.9-4
PROJECT GENERATED TRAFFIC- DOWNEY LANDING, LLC DEVELOPMENT--
AUGUST 2, 2001 SITE PLAN**

Land Use	AM Peak Hour			PM Peak Hour			Daily Traffic
	Total	In	Out	Total	In	Out	
TRIP GENERATION RATES (PER 1,000 SQ. FT.)							
Retail	0.90	61%	39%	3.89	48%	52%	41.19
Studio/Production	0.42	84%	16%	0.52	22%	78%	5.98
Museum/Learning Center	1.32	66%	34%	1.75	34%	66%	22.88
Office	1.30	88%	12%	1.25	17%	83%	8.76
Technology/R & D	1.02	83%	17%	0.91	15%	85%	6.85
Park/Open Space (total)	30	20	10	50	20	30	400
OPTION 1 - WITH BUILDING 1							
AREA I							
Retail (410,000 sq. ft.)	370	226	144	1,593	765	828	16,890
With 25% Passby Reduction	278	170	108	1,195	574	621	12,670
AREA II							
Studio/Production (883,550 sf)	371	312	59	459	101	358	5,280
Museum/Lrn Ctr (50,000 sf)	66	44	22	88	30	58	1,140
Park/Open Space	30	20	10	50	20	30	400
AREA III							
Office (600,000 sq. ft.)	778	685	93	752	128	624	5,620
Total Traffic Generated	1,523	1,231	292	2,544	853	1,691	25,110
With Internal Trip Reduction (5% AM, 10% PM & Daily)	1,450	1,170	280	2,290	770	1,520	22,600
OPTION 2 - WITHOUT BUILDING 1							
AREA I							
Retail (410,000 sq. ft.)	370	226	144	1,593	765	828	16,890
With 25% Passby Reduction	278	170	108	1,195	574	621	12,670
AREA II							
Technology/R & D (975,000sf)	997	828	169	886	133	753	6,680
Museum/Lrn Ctr (50,000 sf)	66	44	22	88	30	58	1,140
Park/Open Space	30	20	10	50	20	30	400
AREA III							
Office (600,000 sq. ft.)	778	685	93	752	128	624	5,620
Total Traffic Generated	2,149	1,747	402	2,971	885	2,086	26,510
With Internal Trip Reduction (5% AM, 10% PM & Daily)	2,040	1,660	380	2,680	800	1,880	23,860

**TABLE 3.9-5
PROJECT GENERATED TRAFFIC – DOWNEY LANDING LLC
REVISED SITE PLAN FEBRUARY 8, 2002**

Land Use	AM Peak Hour			PM Peak Hour			Daily Traffic
	Total	In	Out	Total	In	Out	
TRIP GENERATION RATES (PER 1,000 SQ. FT.)							
Retail	0.90	61%	39%	3.89	48%	52%	41.19
Studio/Production	0.42	84%	16%	0.52	22%	78%	5.98
Museum/Community Center	1.32	66%	34%	1.75	34%	66%	22.88
Office	1.34	88%	12%	1.27	17%	83%	9.07
Technology/R & D	1.01	83%	17%	0.89	15%	85%	6.73
Park/Open Space (total)	30	20	10	50	20	30	400
OPTION 1 – WITH BUILDING 1							
AREA I							
Retail (410,000 sq. ft.)	370	226	144	1,593	765	828	16,890
With 25% Passby Reduction	278	170	108	1,195	574	621	12,670
AREA II							
Studio/Production (1,120,530)	471	396	75	583	128	455	6,700
Museum/Com Ctr (50,000 sf)	66	44	22	88	30	58	1,140
Park/Open Space	30	20	10	50	20	30	400
AREA III							
Office (516,200 sq. ft.)	690	607	83	658	112	546	4,680
Total Traffic Generated With Internal Trip Reduction (5% AM, 10% PM & Daily)	1,535	1,237	298	2,574	864	1,710	25,590
	1,458	1,175	283	2,317	778	1,539	23,030
OPTION 2 – WITHOUT BUILDING 1							
AREA I							
Retail (410,000 sq. ft.)	370	226	144	1,593	765	828	16,890
With 25% Passby Reduction	278	170	108	1,195	574	621	12,670
AREA II							
Technology/R & D (1,072,300)	1,084	900	184	958	144	814	7,220
Museum/Com Ctr (50,000 sf)	66	44	22	88	30	58	1,140
Park/Open Space	30	20	10	50	20	30	400
AREA III							
Office (516,200 sq. ft.)	690	607	83	658	112	546	4,680
Total Traffic Generated With Internal Trip Reduction (5% AM, 10% PM & Daily)	2,148	1,741	407	2,949	880	2,069	26,110
	2,041	1,654	387	2,654	792	1,862	23,500

**TABLE 3.9-6
PROJECT GENERATED TRAFFIC – KAISER DEVELOPMENT--AUGUST 2, 2001 SITE
PLAN**

Land Use	AM Peak Hour			PM Peak Hour			Daily Traffic
	Total	In	Out	Total	In	Out	
TRIP GENERATION RATES (PER 1,000 SQ. FT.)							
Hospital	0.97	73%	27%	0.92	24%	76%	16.78
Medical Office Building	2.43	80%	20%	3.66	27%	73%	36.13
GENERATED TRAFFIC VOLUMES							
Hospital (707,300 sf)	686	501	185	651	156	495	11,870
MOB (292,700 sf)	711	569	142	1,071	289	782	10,580
Total Traffic	1,397	1,070	327	1,722	445	1,277	22,450

**TABLE 3.9-7
PROJECT GENERATED TRAFFIC – KAISER DEVELOPMENT -FEBRUARY 5, 2002 SITE
PLAN**

Land Use	AM Peak Hour			PM Peak Hour			Daily Traffic
	Total	In	Out	Total	In	Out	
TRIP GENERATION RATES (PER 1,000 SQ. FT.)							
Hospital + Central Plant	0.97	73%	27%	0.92	24%	76%	16.78
Medical Office Building	2.43	80%	20%	3.66	27%	73%	36.13
GENERATED TRAFFIC VOLUMES							
Hospital (707,300 sf)	686	501	185	651	156	495	11,870
MOB (292,700 sf)	711	569	142	1,071	289	782	10,580
Total Traffic	1,397	1,070	327	1,722	445	1,277	22,450

**Table 3.9-8
TRAFFIC GENERATION COMPARISON
DEIR (AUGUST 2, 2001) SCENARIO VS. NEW PROPOSALS (FEBRUARY 8, 2002)**

Land Use Scenario	Site-Generated Traffic Volumes		
	AM Peak Hour	PM Peak Hour	Daily Traffic
DEIR Option 2	3,440	4,400	46,310
New Option 1	2,860	4,040	45,480
New Option 2	3,440	4,370	45,950

To quantify the project-related increase in traffic on each street segment and at each intersection in the study area, the project-generated traffic volumes shown in Tables 3.9-4 and 3.9-5 were geographically distributed onto the street network. The geographical distribution assumptions are based on existing travel patterns and the anticipated distribution of customers and employees that would be using the proposed development. The geographical distribution of project generated traffic assumed for the analysis is as follows:

Century Freeway to/from the west	15%
Century Freeway to/from the east	10%
Imperial Highway west of Lakewood Blvd.	10%
Imperial Highway east of Bellflower Blvd.	10%
Stewart & Gray Road west of Lakewood Blvd.	10%
Stewart & Gray Road east of Bellflower Blvd.	10%
Lakewood Boulevard south of Century Freeway	5%
Lakewood Boulevard north of Firestone Blvd.	5%
Firestone Boulevard west of Lakewood Blvd.	5%
Clark Avenue south of Century Freeway	5%
Bellflower Boulevard south of Century Freeway	5%
Washburn Road east of Bellflower Blvd.	2.5%
Woodruff Avenue north of Firestone Blvd.	2.5 %
Alameda Street west of Lakewood Blvd.	2.5%
Ardis Avenue south of Imperial Highway	2.5%

Future Baseline Conditions Without Project

The future baseline traffic conditions without the project were projected by considering the effects of regional growth and the cumulative increase in traffic volumes that would be generated by other development projects proposed in the project area. To estimate the future baseline traffic volumes, the existing traffic volumes were multiplied by a factor of 1.10. The target year for the completion of the Downey Landing, LLC commercial development is 2006, while the target year for the completion of the Kaiser development is 2008. The typical growth rate used in Downey is one percent per year, which would result in an expansion factor of 1.05 for the year 2006 and 1.07 for the year 2008. An overall growth factor of 1.10 is used to ensure that the forecasts are conservatively high and to account for the cumulative effects of other projects in Downey and adjacent jurisdictions, regardless of which target year is assumed.

The future traffic volumes and levels of service that were developed from these cumulative traffic projections were used as the baseline scenario for the traffic impact analysis, as presented in the following sections.

Traffic Impact Analysis

The results of the traffic impact analyses for the Downey Landing, LLC development and the Kaiser development are summarized below. The findings are presented for each individual development project and for the two projects combined.

Downey Landing, LLC Development

An analysis of traffic impacts for the Downey Landing, LLC development was conducted by quantifying the before and after traffic volumes, then determining the ICU values and levels of service at the study area intersections for the "without project" and "with project" scenarios. The before-and-after ICU values and levels of service at each of the intersections in the study area are summarized in Table 3.9-9 for the morning peak hour and in Table 3.9-10 for the afternoon peak hour. The tables show the existing traffic conditions, the future baseline traffic conditions without the project, and the final traffic conditions with the addition of the project-generated traffic. The "Project Impact" column of numbers in Tables 3.9-9 and 3.9-10 indicates the change in ICU values associated with the Downey Landing, LLC project. The final column indicates if the intersection would be significantly impacted by the proposed project based on the significance criteria outlined above.

The intersection of Lakewood Boulevard and Firestone Boulevard, for example, would operate at an ICU value of 1.050 and LOS F for existing conditions, at an ICU value of 1.145 and LOS F for the future without project scenario, and at an ICU value of 1.183 and LOS F with the project during the morning peak hour (Table 3.9-9). The proposed project would change the V/C ratio by an increment of 0.038, which represents a significant impact.

Based on the significance criteria cited previously, the project would have a significant impact at five out of the 20 study area intersections during the morning peak period and at four of these intersections during the afternoon peak period. The Lakewood/Firestone, Lakewood/Stewart & Gray, Lakewood/Imperial, and Bellflower/Imperial intersections would be significantly impacted during the morning and afternoon peak periods, while the Lakewood/Bellflower intersection would be significantly impacted only during the morning peak period by the Downey Landing, LLC development.

**TABLE 3.9-9
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
DOWNEY LANDING, LLC DEVELOPMENT - AM PEAK HOUR**

Intersection	ICU Value - Level of Service				
	Existing Conditions	Future w/o Project	With Project	Project Impact	Significant Impact
Lakewood/Firestone	1.050 - F	1.145 - F	1.183 - F	0.038	Yes
Lakewood/Bellflower	0.819 - D	0.891 - D	0.947 - E	0.056	Yes
Lakewood/Stewart & Gray	0.872 - D	0.949 - E	1.044 - F	0.095	Yes
Lakewood/Alameda	0.588 - A	0.636 - B	0.690 - B	0.054	No
Lakewood/Clark	0.703 - C	0.763 - C	0.886 - D	0.123	No
Lakewood/Imperial	0.775 - C	0.843 - D	0.946 - F	0.103	Yes
Lakewood/I-105 Ramps	0.716 - C	0.777 - C	0.893 - D	0.116	No
Lakewood/Gardendale	0.648 - B	0.703 - C	0.724 - C	0.021	No
Bellflower/Stewart & Gray	0.672 - B	0.729 - C	0.852 - D	0.123	No
Bellflower/Washburn	0.666 - B	0.722 - C	0.801 - D	0.079	No
Bellflower/Imperial	0.909 - E	0.990 - E	1.018 - F	0.028	Yes
Bellflower/I-105 WB	0.581 - A	0.629 - B	0.658 - B	0.029	No
Bellflower/I-105 EB	0.631 - B	0.684 - B	0.730 - C	0.046	No
Imperial/Clark	0.656 - B	0.712 - C	0.757 - C	0.045	No
Imperial/Ardis	0.488 - A	0.526 - A	0.638 - B	0.112	No
Firestone/Woodruff (W)	0.703 - C	0.763 - C	0.778 - C	0.015	No
Firestone/Woodruff (E)	0.653 - B	0.708 - C	0.712 - C	0.004	No
Firestone/Stewart & Gray	0.724 - C	0.786 - C	0.809 - D	0.023	No
Woodruff/Stewart & Gray	0.613 - B	0.663 - B	0.690 - B	0.026	No
Woodruff/Imperial	0.711 - C	0.772 - C	0.823 - D	0.051	No

**TABLE 3.9-10
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
DOWNEY LANDING, LLC DEVELOPMENT – PM PEAK HOUR**

Intersection	ICU Value – Level of Service				
	Existing Conditions	Future w/o Project	With Project	Project Impact	Significant Impact
Lakewood/Firestone	1.141 - F	1.244 - F	1.273 - F	0.029	Yes
Lakewood/Bellflower	0.734 - C	0.798 - C	0.848 - D	0.050	No
Lakewood/Stewart & Gray	0.847 - D	0.922 - E	1.042 - F	0.120	Yes
Lakewood/Alameda	0.616 - B	0.667 - B	0.771 - C	0.104	No
Lakewood/Clark	0.659 - B	0.715 - C	0.847 - D	0.132	No
Lakewood/Imperial	0.937 - E	1.021 - F	1.183 - F	0.162	Yes
Lakewood/I-105 Ramps	0.714 - C	0.776 - C	0.884 - D	0.108	No
Lakewood/Gardendale	0.662 - B	0.719 - C	0.746 - C	0.027	No
Bellflower/Stewart & Gray	0.609 - B	0.660 - B	0.743 - C	0.083	No
Bellflower/Washburn	0.441 - A	0.475 - A	0.615 - B	0.140	No
Bellflower/Imperial	0.828 - D	0.901 - E	1.024 - F	0.123	Yes
Bellflower/I-105 WB	0.494 - A	0.533 - A	0.600 - B	0.067	No
Bellflower/I-105 EB	0.481 - A	0.519 - A	0.595 - A	0.076	No
Imperial/Clark	0.684 - B	0.743 - C	0.781 - C	0.038	No
Imperial/Ardis	0.509 - A	0.550 - A	0.742 - C	0.192	No
Firestone/Woodruff (W)	0.681 - B	0.739 - C	0.756 - C	0.017	No
Firestone/Woodruff (E)	0.738 - C	0.801 - D	0.816 - D	0.015	No
Firestone/Stewart & Gray	0.680 - B	0.737 - C	0.814 - D	0.077	No
Woodruff/Stewart & Gray	0.637 - B	0.691 - B	0.752 - C	0.061	No
Woodruff/Imperial	0.743 - C	0.807 - D	0.855 - D	0.048	No

Kaiser Development

An analysis of traffic impacts for the Kaiser development was conducted by quantifying the before and after traffic volumes, ICU values, and levels of service at the study area intersections for the "without project" and "with project" scenarios. The before-and-after ICU values and levels of service at each of the intersections in the study area are summarized in Table 3.9-11 for the morning peak hour and in Table 3.9-12 for the afternoon peak hour. The tables show the existing traffic conditions, the future baseline traffic conditions without the project, and the final traffic conditions with the addition of the project-generated traffic. The last column of numbers in Tables 3.9-11 and 3.9-12 indicates the change in ICU values associated with the Kaiser project. The "Significant Impact" column indicates if the intersection would be significantly impacted by the proposed project based on the significance criteria cited previously.

Based on the significance criteria, the project would have a significant impact at four out of the 20 study area intersections during the morning peak period and at two intersections during the afternoon peak period. The Bellflower/Imperial intersection would be significantly impacted during the morning and afternoon peak periods, the Lakewood/Firestone, Lakewood/Bellflower, and Lakewood/Stewart & Gray intersections would be significantly impacted only during the morning peak period, and the Lakewood/Imperial intersection would be significantly impacted only during the afternoon peak period by the Kaiser development.

**TABLE 3.9-11
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
KAISER DEVELOPMENT - AM PEAK HOUR**

Intersection	ICU Value – Level of Service				
	Existing Conditions	Future w/o Project	With Project	Project Impact	Significant Impact
Lakewood/Firestone	1.050 – F	1.145 – F	1.171 – F	0.026	Yes
Lakewood/Bellflower	0.819 – D	0.891 – D	0.958 – E	0.067	Yes
Lakewood/Stewart & Gray	0.872 – D	0.949 – E	0.982 – E	0.033	Yes
Lakewood/Alameda	0.588 – A	0.636 – B	0.652 – B	0.016	No
Lakewood/Clark	0.703 – C	0.763 – C	0.775 – C	0.012	No
Lakewood/Imperial	0.775 – C	0.843 – D	0.887 – D	0.044	No
Lakewood/I-105 Ramps	0.716 – C	0.777 – C	0.798 – C	0.021	No
Lakewood/Gardendale	0.648 – B	0.703 – C	0.718 – C	0.015	No
Bellflower/Stewart & Gray	0.672 – B	0.729 – C	0.851 – D	0.122	No
Bellflower/Washburn	0.666 – B	0.722 – C	0.791 – C	0.069	No
Bellflower/Imperial	0.909 – E	0.990 – E	1.117 – F	0.127	Yes
Bellflower/I-105 WB	0.581 – A	0.629 – B	0.675 – B	0.046	No
Bellflower/I-105 EB	0.631 – B	0.684 – B	0.739 – C	0.055	No
Imperial/Clark	0.656 – B	0.712 – C	0.766 – C	0.054	No
Imperial/Ardis	0.488 – A	0.526 – A	0.713 – C	0.187	No
Firestone/Woodruff (W)	0.703 – C	0.763 – C	0.773 – C	0.010	No
Firestone/Woodruff (E)	0.653 – B	0.708 – C	0.710 – C	0.002	No
Firestone/Stewart & Gray	0.724 – C	0.786 – C	0.816 – D	0.030	No
Woodruff/Stewart & Gray	0.613 – B	0.664 – B	0.685 – B	0.021	No
Woodruff/Imperial	0.711 – C	0.772 – C	0.804 – D	0.032	No

**TABLE 3.9-12
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
KAISER DEVELOPMENT - PM PEAK HOUR**

Intersection	ICU Value – Level of Service				
	Existing Conditions	Future w/o Project	With Project	Project Impact	Significant Impact
Lakewood/Firestone	1.141 - F	1.244 - F	1.263 - F	0.019	No
Lakewood/Bellflower	0.734 - C	0.798 - C	0.826 - D	0.028	No
Lakewood/Stewart & Gray	0.847 - D	0.922 - E	0.936 - E	0.014	No
Lakewood/Alameda	0.616 - B	0.667 - B	0.694 - B	0.027	No
Lakewood/Clark	0.659 - B	0.715 - C	0.732 - C	0.017	No
Lakewood/Imperial	0.937 - E	1.021 - F	1.110 - F	0.089	Yes
Lakewood/I-105 Ramps	0.714 - C	0.776 - C	0.803 - D	0.027	No
Lakewood/Gardendale	0.662 - B	0.719 - C	0.735 - C	0.016	No
Bellflower/Stewart & Gray	0.609 - B	0.660 - B	0.768 - C	0.105	No
Bellflower/Washburn	0.441 - A	0.475 - A	0.629 - B	0.154	No
Bellflower/Imperial	0.828 - D	0.901 - E	1.016 - F	0.115	Yes
Bellflower/I-105 WB	0.494 - A	0.533 - A	0.609 - B	0.076	No
Bellflower/I-105 EB	0.481 - A	0.519 - A	0.613 - B	0.094	No
Imperial/Clark	0.684 - B	0.743 - C	0.809 - D	0.066	No
Imperial/Ardis	0.509 - A	0.550 - A	0.700 - C	0.150	No
Firestone/Woodruff (W)	0.681 - B	0.739 - C	0.748 - C	0.009	No
Firestone/Woodruff (E)	0.680 - B	0.737 - C	0.747 - C	0.010	No
Firestone/Stewart & Gray	0.731 - C	0.794 - C	0.847 - D	0.053	No
Woodruff/Stewart & Gray	0.637 - B	0.691 - B	0.740 - C	0.049	No
Woodruff/Imperial	0.743 - C	0.807 - D	0.843 - D	0.036	No

Combined Downey Landing, LLC & Kaiser Developments

An analysis of traffic impacts for the combined Downey Landing, LLC and Kaiser developments was conducted by quantifying the before and after traffic volumes, ICU values, and levels of service at the study area intersections for the "without project" and "with project" scenarios. The before-and-after ICU values and levels of service at each of the intersections in the study area are summarized in Table 3.9-13 for the morning peak hour and in Table 3.9-14 for the afternoon peak hour. The tables show the existing traffic conditions, the future baseline traffic conditions without the project, and the final traffic conditions with the addition of the project-generated traffic for the entire Specific Plan development. The "Project Impact" column of numbers in Tables 3.9-13 and 3.9-14 indicates the change in ICU values associated with the combined Downey Landing, LLC and Kaiser projects. The final column indicates if the

intersection would be significantly impacted by the proposed project based on the significance criteria cited previously.

Based on the significance criteria, the project would have a significant impact at six out of the 20 study area intersections during the morning peak period and at four of these intersections during the afternoon peak period. The Lakewood/Firestone, Lakewood/Stewart & Gray, Lakewood/Imperial, and Bellflower/Imperial intersections would be significantly impacted during the morning and afternoon peak periods, while the Lakewood/Bellflower and Bellflower/Stewart & Gray intersections would be significantly impacted only during the morning peak period.

**TABLE 3.9-13
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
COMBINED DOWNEY LANDING, LLC & KAISER DEVELOPMENTS - AM PEAK HOUR**

Intersection	ICU Value – Level of Service				
	Existing Conditions	Future w/o Project	With Project	Project Impact	Significant Impact
Lakewood/Firestone	1.050 – F	1.145 – F	1.209 – F	0.064	Yes
Lakewood/Bellflower	0.819 – D	0.891 – D	1.014 – F	0.123	Yes
Lakewood/Stewart & Gray	0.872 – D	0.949 – E	1.077 – F	0.128	Yes
Lakewood/Alameda	0.588 – A	0.636 – B	0.706 – C	0.070	No
Lakewood/Clark	0.703 – C	0.763 – C	0.898 – D	0.135	No
Lakewood/Imperial	0.775 – C	0.843 – D	0.990 – E	0.147	Yes
Lakewood/I-105 Ramps	0.716 – C	0.777 – C	0.914 – E	0.137	No
Lakewood/Gardendale	0.648 – B	0.703 – C	0.739 – C	0.036	No
Bellflower/Stewart & Gray	0.672 – B	0.729 – C	0.974 – E	0.245	Yes
Bellflower/Washburn	0.666 – B	0.722 – C	0.870 – D	0.148	No
Bellflower/Imperial	0.909 – E	0.990 – E	1.145 – F	0.155	Yes
Bellflower/I-105 WB	0.581 – A	0.629 – B	0.704 – C	0.075	No
Bellflower/I-105 EB	0.631 – B	0.684 – B	0.785 – C	0.101	No
Imperial/Clark	0.656 – B	0.712 – C	0.811 – D	0.099	No
Imperial/Ardis	0.488 – A	0.526 – A	0.825 – D	0.299	No
Firestone/Woodruff (W)	0.703 – C	0.763 – C	0.788 – C	0.025	No
Firestone/Woodruff (E)	0.653 – B	0.708 – C	0.714 – C	0.006	No
Firestone/Stewart & Gray	0.724 – C	0.786 – C	0.839 – D	0.053	No
Woodruff/Stewart & Gray	0.613 – B	0.664 – B	0.711 – C	0.047	No
Woodruff/Imperial	0.711 – C	0.772 – C	0.855 – D	0.083	No

TABLE 3.9-14
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
COMBINED DOWNEY LANDING, LLC & KAISER DEVELOPMENTS - PM PEAK HOUR

Intersection	ICU Value – Level of Service				
	Existing Conditions	Future w/o Project	With Project	Project Impact	Significant Impact
Lakewood/Firestone	1.141 – F	1.244 – F	1.293 – F	0.049	Yes
Lakewood/Bellflower	0.734 – C	0.798 – C	0.876 – D	0.078	No
Lakewood/Stewart & Gray	0.847 – D	0.922 – E	1.056 – F	0.134	Yes
Lakewood/Alameda	0.616 – B	0.667 – B	0.798 – C	0.131	No
Lakewood/Clark	0.659 – B	0.715 – C	0.864 – D	0.149	No
Lakewood/Imperial	0.937 – E	1.021 – F	1.272 – F	0.251	Yes
Lakewood/I-105 Ramps	0.714 – C	0.776 – C	0.911 – E	0.135	No
Lakewood/Gardendale	0.662 – B	0.719 – C	0.762 – C	0.043	No
Bellflower/Stewart & Gray	0.609 – B	0.660 – B	0.851 – D	0.191	No
Bellflower/Washburn	0.441 – A	0.475 – A	0.769 – C	0.294	No
Bellflower/Imperial	0.828 – D	0.901 – E	1.139 – F	0.238	Yes
Bellflower/I-105 WB	0.494 – A	0.533 – A	0.676 – B	0.143	No
Bellflower/I-105 EB	0.481 – A	0.519 – A	0.689 – B	0.170	No
Imperial/Clark	0.684 – B	0.743 – C	0.847 – D	0.104	No
Imperial/Ardis	0.509 – A	0.550 – A	0.892 – D	0.342	No
Firestone/Woodruff (W)	0.681 – B	0.739 – C	0.765 – C	0.026	No
Firestone/Woodruff (E)	0.738 – C	0.801 – D	0.826 – D	0.025	No
Firestone/Stewart & Gray	0.680 – B	0.737 – C	0.867 – D	0.130	No
Woodruff/Stewart & Gray	0.637 – B	0.691 – B	0.801 – D	0.110	No
Woodruff/Imperial	0.743 – C	0.807 – D	0.891 – D	0.084	No

Congestion Management Program (CMP) Analysis

An analysis was conducted to determine if the project would have a significant impact at the nearest CMP freeway monitoring station, which is the I-105 Freeway between Bellflower Boulevard and the I-605 Freeway. The Los Angeles County CMP indicates that a project would have a significant freeway impact if the demand/capacity (D/C) ratio increases by 0.02 or more on a facility operating at LOS F. The impacts of the Downey Landing, LLC development on I-105 at this CMP monitoring location are summarized on Table 3.9-15 for the AM and PM peak hours. The peak hour traffic volume, demand/capacity ratio, and level of service are shown for the existing conditions, future year without project, and future year with project scenarios. The analysis indicates that the Downey Landing, LLC project would have a significant impact at this freeway location according to the CMP guidelines as the locations that operate at LOS F have a project impact greater than 0.02 during the morning peak hour in the westbound direction and during the afternoon peak hour in the eastbound direction.

**TABLE 3.9-15
PROJECT IMPACTS AT CMP FREEWAY MONITORING STATION
DOWNEY LANDING, LLC DEVELOPMENT**

I-105 Freeway Segment Bellflower to I-605	AM Peak Hour			PM Peak Hour		
	Volume	D/C	LOS	Volume	D/C	LOS
Eastbound (Capacity of 8,000 vehicles/hour)						
Existing Conditions	5,392	0.674	C	11,680	1.460	F(3)
Future Without Project	5,930	0.741	C	12,850	1.606	F(3)
Future With Project	5,968	0.746	C	13,038	1.630	F(3)
Increase in D/C Ratio		0.005			0.024	
Westbound (Capacity of 8,000 vehicles/hour)						
Existing Conditions	10,080	1.260	F(1)	4,598	0.575	C
Future Without Project	11,090	1.386	F(2)	5,060	0.633	C
Future With Project	11,256	1.407	F(2)	5,140	0.643	C
Increase in D/C Ratio		0.021			0.010	

The relationship between D/C ratio and level of service for freeways is as follows:

<u>D/C Ratio</u>	<u>LOS</u>
0.00 - 0.35	A
>0.35 - 0.54	B
>0.54 - 0.77	C
>0.77 - 0.93	D
>0.93 - 1.00	E
>1.00 - 1.25	F(0)
>1.25 - 0.35	F(1)
>1.35 - 1.45	F(2)
>1.45	F(3)

The impacts of the Kaiser development on I-105 at this CMP monitoring location are summarized on Table 3.9-16 for the AM and PM peak hours. The analysis indicates that the Kaiser project would have a significant impact at this freeway location according to the CMP guidelines as the locations that operate at LOS F have a project impact greater than 0.02 during the morning peak hour in the westbound direction and during the afternoon peak hour in the eastbound direction.

**TABLE 3.9-16
PROJECT IMPACTS AT CMP FREEWAY MONITORING STATION - KAISER DEVELOPMENT**

I-105 Freeway Segment Bellflower to I-605	AM Peak Hour			PM Peak Hour		
	Volume	D/C	LOS	Volume	D/C	LOS
Eastbound (Capacity of 8,000 vehicles/hour)						
Existing Conditions	5,392	0.674	C	11,680	1.460	F(3)
Future Without Project	5,930	0.741	C	12,850	1.606	F(3)
Future With Project	5,963	0.745	C	12,978	1.622	F(3)
Increase in D/C Ratio		0.004			0.016	
Westbound (Capacity of 8,000 vehicles/hour)						
Existing Conditions	10,080	1.260	F(1)	4,598	0.575	C
Future Without Project	11,090	1.386	F(2)	5,060	0.633	C
Future With Project	11,197	1.400	F(2)	5,105	0.638	C
Increase in D/C Ratio		0.014			0.005	

The impacts of the combined Downey Landing, LLC and Kaiser developments on I-105 at the CMP monitoring location are summarized on Table 3.9-17 for the AM and PM peak hours. The analysis indicates that the combined projects would have a significant impact at this freeway location according to the CMP guidelines as the locations that operate at LOS F have a project impact greater than 0.02 during the morning peak hour in the westbound direction and during the afternoon peak hour in the eastbound direction.

**TABLE 3.9-17
PROJECT IMPACTS AT CMP FREEWAY MONITORING STATION - COMBINED DEVELOPMENTS**

I-105 Freeway Segment Bellflower to I-605	AM Peak Hour			PM Peak Hour		
	Volume	D/C	LOS	Volume	D/C	LOS
Eastbound (Capacity of 8,000 vehicles/hour)						
Existing Conditions	5,392	0.674	C	11,680	1.460	F(3)
Future Without Project	5,930	0.741	C	12,850	1.606	F(3)
Future With Project	6,001	0.750	C	13,166	1.646	F(3)
Increase in D/C Ratio		0.009			0.040	
Westbound (Capacity of 8,000 vehicles/hour)						
Existing Conditions	10,080	1.260	F(1)	4,598	0.575	C
Future Without Project	11,090	1.386	F(2)	5,060	0.633	C
Future With Project	11,363	1.420	F(2)	5,185	0.648	C
Increase in D/C Ratio		0.034			0.015	

Construction Impacts

Construction of the proposed project is expected to be staged over a period of several years. The construction activities would generate varying levels of truck and automobile traffic throughout the duration of the construction phase. The construction-related traffic is generated by construction workers traveling to and from the site as well as trucks hauling material to and from the site. It is estimated that the construction activities would generate up to 400 worker-trips and an estimated 50 to 100 trucks per day to deliver construction material and remove demolition material from the site.

Parking Impacts

The proposed parking facilities at the Downey Landing, LLC and Kaiser developments would meet or exceed the City of Downey parking requirements, and parking during the construction activities would be accommodated on site. There would, therefore, be no significant parking impacts associated with the project.

Potentially Significant Impacts

Implementation of the proposed project would result in the following potentially significant impacts:

Impact 3.9-1: Traffic generated by the proposed project would result in an increase of 0.02 or greater in the ICU value for intersections that are projected to operate at Level of Service E or F.

Table 3.9-18 is a summary of the project's significant impacts at the affected study area intersections. The ICU values and levels of service for these intersections are shown in Tables 3.9-9 through 3.9-14. Implementation of Mitigation Measures 3.9-1 through 3.9-6 would reduce these impacts to a less than significant level.

**TABLE 3.9-18
SUMMARY OF SIGNIFICANT IMPACTS AT INTERSECTIONS**

Intersection	Downey Landing, LLC		Kaiser		Combined	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Lakewood/Firestone	X	X	X		X	X
Lakewood/Bellflower	X		X		X	
Lakewood/Stewart & Gray	X	X	X		X	X
Lakewood/Imperial	X	X		X	X	X
Bellflower/Stewart & Gray					X	
Bellflower/Imperial	X	X	X	X	X	X

Impact 3.9-2: Traffic generated by the proposed project would result in a significant impact on the Century Freeway (I-105) between Bellflower Boulevard and the I-605 Freeway during the morning and afternoon peak hours based on the criteria in the LA County Congestion Management Program (CMP).

The project would result in a significant impact at this CMP freeway monitoring location because it would result in an increase in the demand/capacity ratio of 0.02 or greater during the peak period times when the freeway is operating at level of service F. The traffic volumes, D/C ratios, and levels of service are shown in Table 3.9-15 through 3.9-17. No mitigation measure is recommended for this freeway impact.

Significant Unavoidable Impacts

The Congestion Management Program (CMP) impact on the Century Freeway (I-105) during the morning and afternoon peak periods would be significant unavoidable traffic impacts that are anticipated to result from the proposed project. There are no feasible project-related mitigation measures available for this impact.

3.9.6 Cumulative Impacts

As the traffic analysis presented above includes the cumulative impacts of general area-wide growth and traffic that would be generated by other proposed development projects in the study vicinity, the overall cumulative impacts and the proposed project's contribution to the cumulative impacts have been addressed and quantified. The traffic, parking, and truck-related

impacts during construction could potentially be exacerbated by the cumulative effects of other construction projects in the area if the construction schedules were to overlap.

3.9.7 Mitigation

The following measures are proposed to mitigate the project's traffic impacts. It should be clarified, however, that these improvements would be required to mitigate the total cumulative impacts of the entire development project, which includes the Downey Landing, LLC and Kaiser components. These mitigation measures, as described, would not necessarily be required to mitigate partial development of the project site. For example, if the commercial component of the Downey Landing, LLC development were to be completed as an initial phase, only a subset of the overall mitigation program would be required. Similarly, if the Downey Landing, LLC commercial property and the medical office building at the Kaiser site were to be developed as the initial phase, a different subset of the overall mitigation plan would be required. As it is very likely that the project would be developed in phases, which cannot accurately be specified at this time, it shall also be required that a mitigation plan will be prepared to link the specific mitigation measures with the various levels and/or combinations of development. This phased mitigation plan has been included as Mitigation Measure 3.9-7.

It should also be clarified that the mitigation measures described below are based on preliminary observations at each affected location. A detailed design of these proposed improvements has not been conducted to determine if they are feasible relative to such issues as right-of-way availability and other physical constraints. If any of the proposed mitigation measures are deemed to be infeasible during the design phase, it would be acceptable to substitute the physical improvement with a requirement that the project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at the affected location. The proportional share of the cost that would be applied to each project component would be established by the City based on a formula that would identify the relative impacts of each participating project. It should also be clarified that an alternative intersection improvement may be substituted for any of the mitigation measures outlined below if the alternative would adequately mitigate the identified project impacts, as determined by the City of Downey.

Mitigation Measure 3.9-1: Provide a Second Northbound-to-Westbound Left-Turn Lane on Lakewood Boulevard at the Lakewood/Firestone Intersection, -OR- Provide Right-Turn Lanes in the Northbound, Southbound, and Eastbound Directions and Double Left-Turn Lanes in the Eastbound and Westbound Directions, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall

contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.

Mitigation Measure 3.9-2: Provide an Additional Northbound Through Lane on Lakewood Boulevard at the Lakewood/Bellflower Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.

Mitigation Measure 3.9-3: Provide an Additional Northbound and Southbound Through Lane on Lakewood Boulevard at the Lakewood/Stewart & Gray Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.

Mitigation Measure 3.9-4: Provide an Additional Westbound-to-Southbound Left-Turn Lane on Imperial Highway at the Lakewood/Imperial Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.

Mitigation Measure 3.9-5: Provide an Eastbound-to-Southbound Right-Turn Lane on Imperial Highway at the Imperial/Bellflower Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program

administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.

Mitigation Measure 3.9-6: Provide a Southbound-to-westbound Right-Turn Lane on Bellflower Boulevard at the Bellflower/Stewart & Gray Intersection, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at this location.

Mitigation Measure 3.9-7: Prepare a Phased Mitigation Plan to link the specific mitigation measures (Measures 3.9-1 through 3.9-6) with the various levels and/or combinations of development that are anticipated for the development, as feasible within existing right-of-way. If this mitigation measure is deemed infeasible (i.e., it could not be completed within existing right-of-way), project applicant shall contribute to a fair-share funding program administered by the City of Downey to be applied as a partial payment of the roadway improvement or traffic signal coordination system that the City may ultimately install at these locations.

4.0 Alternatives to the Proposed Project

4.1 Introduction

Section 15126.6(a) of the CEQA Guidelines requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, that could feasibly attain the basic objectives of the project. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR should also evaluate the comparative merits of the alternatives. This chapter sets forth alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines relating to the alternatives analysis are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- One of the alternatives analyzed must be the “no project” alternative. The “no project” analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a “rule of reason”; therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- The EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

Rationale for Selecting Potentially Feasible Alternatives

Since the CEQA Guidelines require that an EIR state why an alternative is being rejected, a preliminary rationale for rejecting an alternative is presented, where applicable, in this EIR. If the City ultimately rejects any, or all alternatives, the rationale for the rejection will be presented in the findings that are required to be made before the City certifies the EIR and takes action on the project. If an alternative would cause any significant effects in addition to those that would be caused by the project, the significant effects of the alternative must be discussed, although in less detail than the significant effects of the project.

The alternatives may include no project, a different type of project, modification of the proposed project, or suitable alternative project sites. However, the range of alternatives discussed in an EIR is governed by a "rule of reason" which CEQA Guidelines Section 15126.6(f) defines as setting forth:

only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

Among the factors that may be taken into account when addressing the feasibility of alternatives (as described in CEQA Section 15126.6(f)(1)) are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the proponent could reasonably acquire, control, or otherwise have access to the alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, whose implementation is remote or speculative, and that would not achieve the basic project objectives.

For purposes of this analysis, the project alternatives are evaluated to determine the extent to which they attain the basic project objectives, while significantly lessening any significant effects of the project. The objectives of the City of Downey (the Lead Agency) and the project applicants for the project are as follows:

- Develop a land use plan for a currently underutilized site, which at build-out will result in the development of a distinctive mixed-use project (i.e., retail center, television/film production facilities, business park, museum/learning center, and hospital and medical office facility) that is consistent with the goals and policies of the City's General Plan.
- Create employment opportunities that will replace the jobs that were lost with the closing of the NASA facility, with respect to both quantity and quality.

- Develop a specific plan that will ensure project compatibility with neighboring land uses through the use of land use controls and design guidelines, while providing for both employment and shopping opportunities.
- Increase and diversify the number of retail merchandise opportunities in the community for the purpose of capturing those Downey residents who are shopping elsewhere so as to reduce the City's leakage of sales tax revenue.
- Provide for the development of additional retail businesses so as to enlarge the City's retail trade area and in turn strengthen its economic base.
- Enhance the visual character of the project site, which in turn will help to strengthen the image of the community.
- Replace the project site's existing zoning districts with a mixed-use specific plan that recognizes the site's unique features and location advantages, provides for its orderly development, and attracts high-quality retailers, businesses, and technology companies.
- Provide public improvements to serve the project site and thereby ensure an improved environmental quality for onsite businesses and employees.
- Develop a built environment that reflects a high level of concern for architectural and urban design principles through a Specific Plan.
- Attract businesses that generate positive net revenues for the community to help support local services.
- Highlight the use of some of the site's existing buildings with the advantages they offer as locations for film and television production.
- Diversify and strengthen the City's economic base by attracting base-type businesses.
- Preserve that portion of Building 1 that has been designated historical.
- Prepare a specific plan that recognizes the history that occurred at the project site involving the development of NASA's Apollo and Space Shuttle programs.
- Develop a specific plan whose land use components are internally linked for pedestrian and vehicular travel.
- Replace the functionally outmoded Kaiser Bellflower hospital with new structures that meet current life safety, fire and seismic requirements for health care facilities.
- Continue to provide health care in Kaiser owned facilities to Kaiser members served by the Bellflower facility during the replacement of the Kaiser Bellflower hospital.
- Provide a consolidated and centralized medical center location for Kaiser members in the Downey/Bellflower community to receive medical care.

- Offer state-of-the-art medical care in facilities to be constructed and designed to optimize the quality of patient care in the new millennium.

The EIR has found the following potential adverse effects of the proposed project are either less than significant, or capable of mitigation to a less-than-significant level:

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Utilities

The proposed project has been found to cause significant unavoidable impacts in the following areas:

- Aesthetics
- Air Quality
- Traffic and Circulation

The Lead Agency selected the alternative below for a variety of reasons; however, the goal for evaluating the alternative is to identify ways to mitigate or avoid the significant environmental effects identified above resulting from the proposed project. This EIR analyzes the following feasible alternative:

- No Project/No Development

In summary, the purpose of this section is to discuss this feasible alternative and to evaluate its ability to reduce or avoid significant or adverse impacts. Please refer to the individual Environmental Analysis sections of the EIR, as well as the Executive Summary, for a detailed discussion of the levels of significance in each issue area for the proposed project.

4.2 No Project/No Development Alternative

Description

In addition to alternative development scenarios, Section 15126.6(e) of the CEQA Guidelines requires the analyses of a "no project" alternative. This "no project" analysis must discuss the existing condition of the project site, as well as what would be reasonably expected to occur in the foreseeable future if the project were not to be approved. The "no project" alternative represents the *status quo*, or maintaining the project site in its current state, which is predominantly unoccupied except for interim movie industry uses of a portion of the site for production and sound stage activities. No new environmental effects would directly result from the selection of this alternative.

Maintenance of the project site in the present state would allow the site to continue in its current, predominantly abandoned state. Because the site would not be developed, any significant and adverse environmental impacts directly or cumulatively associated with the proposed project would be avoided.

Attainment of Project Objectives

This alternative would not meet the basic project objectives outlined above. Vacancy would not constitute the highest and best use of the site, which is zoned for General Manufacturing; no increased employment opportunities would be created; no additional retail merchandise shopping opportunities would be created to serve the residents of Downey and strengthen the City's economic base; the visual character of the site would not be enhanced; businesses that generate positive net revenues for the community would not be attracted to the area; and no development regulations for the site would result.

4.3 Alternatives Found to Be Infeasible

Reduced Scale Alternative

Description

This alternative proposes to reduce the scale of the proposed project in order to reduce environmental impacts associated with the proposed project. This alternative would be most useful in minimizing significant unavoidable traffic and associated air quality impacts from the proposed project.

Attainment of Project Objectives

Implementation of this alternative would not meet the basic project objectives outlined above. Project applicant Downey Landing, LLC has indicated that due to purchase and lease prices, it is economically infeasible to reduce the project size and still support the project by potential revenues. Downey Landing, LLC has stated that it has met the minimum amount of development square footage to obtain a critical mass of building for the size of the site.

With a reduced alternative, it would be economically infeasible for project applicant Kaiser to construct a substantial enough hospital facility to accommodate the needs of its membership, and none of Kaiser's project objectives would be met by this alternative.

Alternative Site

According to the CEQA Guidelines, two major provisions are necessary for an adequate alternative site analysis—feasibility and location. The EIR should consider alternate project locations if a

significant project impact could be avoided or substantially lessened by moving the project to an alternative site.

The project sponsor Kaiser considered and rejected several alternatives that all involved the closing of Kaiser's Bellflower Hospital and contracting for inpatient services at nearby community hospitals. These alternatives are listed below, together with the factors that made them infeasible:

BELLFLOWER AREA						
Hospital	Owner	Available Beds	OR's	Birthing	Capacity	Feasibility
St. Francis	CHW	No response to request for information (RFI)	No response to RFI	No response to RFI	No response to RFI	Prior attempt to partner with CHW not viable. Capacity issue.
Downey Community	Independent	167	11	4329	Insufficient capacity to meet Kaiser Permanente (KP) demand	Required construction to support KP demand
Lakewood Regional	Tenet	124	8	2331	Insufficient capacity to meet KP demand	Required construction to support KP demand

HARBOR CITY AREA						
Hospital	Owner	Available Beds	OR's	Birthing	Capacity	Feasibility
Long Beach Community	CHW	260	10	5256	Insufficient capacity to meet KP demand except Pediatrics	Issue on location of hospital
St. Mary Medical Center	CHW	276	15	4672	Insufficient capacity to meet KP demand	Facility did not supply long range capacity. Used KP assumption based on historical trends
Long Beach Community & St. Mary's	CHW	536	25	9928	Capacity available to meet KP demand	Issue on location of hospitals.
San Pedro Peninsula	Independent	98	7	4672	Insufficient capacity to meet KP demand	
Little Company of Mary		198	9	3504	Insufficient capacity to meet KP demand	

HARBOR CITY AREA						
Hospital	Owner	Available Beds	OR's	Birthing	Capacity	Feasibility
Long Beach Memorial		473	30	11,680	Insufficient capacity to meet KP demand	Contract negotiations difficult
Torrance Memorial	No response to RFI	No response to RFI	No response to RFI	No response to RFI	No response to RFI	

Source: Kaiser Permanente, Office of General Counsel, Indrajit Obeysekere, July 2001

Kaiser has searched for sites sufficiently large (20 to 30 acres) to locate a medical center for several years. Due to the condition of its existing Bellflower Hospital and the need to provide seismically safe and modern facilities to its members, Kaiser could not continue its search. During the past 5 years, Kaiser considered the following adequately sized sites. However, most of them were determined not to be in the appropriate geographic location, after Kaiser extensively studied driving distances, zip codes and travel routes:

1. 2740-2750 Lomita Blvd., Torrance (24 acres available for lease or sale). This site was rejected because of its lack of proximity to Kaiser's membership and was determined to be geographically infeasible.
2. 19800 Van Ness Avenue, Torrance (49 acres site available for lease or sale). This site was rejected because of its lack of proximity to Kaiser's membership and was determined to be geographically infeasible.
3. Northrop Site at Crenshaw 105 (28 acres site available for lease or sale). This site was rejected because of its lack of proximity to Kaiser's membership and was determined to be geographically infeasible.
4. 100 East Sepulveda Boulevard, Carson. (32 acres site available for lease or sale). This site was rejected because of its lack of proximity to Kaiser's membership and was determined to be geographically infeasible.
5. Norwalk School District site (30 acres for lease or sale). The seller was unwilling to sell.
6. City of Norwalk (50 acres leased to tank farm). The City refuses to negotiate issues surround a reversionary interest, making this choice infeasible.
7. Tweedy & Kest Streets, Southgate (40 acres site available for lease or sale). This site was rejected because of its lack of proximity to Kaiser's membership and was determined to be geographically infeasible and not configured appropriately for Kaiser's needs.

All of the above alternatives were rejected as infeasible because of the factors enumerated, including location, planning code and zoning limitations, size constraints, site configuration, economic factors, and lack of operational synergy with Kaiser's other facilities.

The proposed project is unique by virtue of its location and existing uses. It is a 160-acre, primarily vacant site. There is no other location of this size within the City. In addition, if an alternative site were available, many of the same significant environmental impacts associated with the proposed project site would potentially occur at an alternate site (e.g., impacts on aesthetics, air quality, and traffic). Therefore, a discussion of an alternative site would not be feasible, nor would it meet the "rule of reason" under CEQA. This alternative was eliminated from further consideration in this EIR.

No Project/Less Intense/Reasonable Foreseeable Use Alternative

This alternative discusses potential impacts associated with build-out of the project site under the existing zoning and General Plan for the site. Under this alternative, development would reflect and expand the movie industry uses currently on site or encourage other new businesses to move into the existing buildings. This alternative would be useful in reducing traffic, noise, and air quality impacts from the proposed project. While the impacts of this alternative would be less than with the proposed project, the alternative does not meet project objectives and was therefore eliminated from further consideration.

4.4 Summary of Project Alternatives

A summary of the identified feasible project alternative, and a comparison of environmental impacts relative to the proposed project, is presented in Table 4-1.

TABLE 4-1

SUMMARY OF PROJECT ALTERNATIVE

Issue Area	No Project/No Development
Aesthetics	-1
Air Quality	-1
Noise	-1
Hazards and Hazardous Materials	-1
Hydrology and Water Quality	-1
Land Use and Planning	-1
Public Services and Utilities	-1
Population and Housing	-1
Traffic and Circulation	-1
TOTAL	-9
+1: Impacts are greater than those created by the proposed project	
-1: Impacts are less than those created by the proposed project	
0: Impacts are the same as those created by the proposed project	

Source: EIP Associates

4.5 Environmentally Superior Alternative

The No Project/No Development option most significantly lessens all environmental impacts associated with the proposed project, and would be considered the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the “no project” alternative is identified as environmentally superior, the EIR shall also identify an environmentally superior alternative among the other alternatives. The No Project/Less Intense/Reasonably Foreseeable Use option also lessens the environmental impacts associated with the proposed project, but does not meet basic project objectives. Therefore, although the other alternatives could reduce the environmental impacts of the proposed project, the other alternatives would not achieve basic project objectives.

5.0 Long-Term Implications of the Proposed Project

5.1 Growth-Inducing Impacts

Section 15126 of the State CEQA Guidelines requires that this section discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment. Growth-inducing impacts are caused by those characteristics of a project that tend to foster or encourage population and/or economic growth. Inducements to growth include the generation of construction and permanent employment opportunities in the support sector of the economy. The proposed project could result in the following types of growth-inducing impacts: 1) the creation of short-term employment opportunities associated with construction of the project; and 2) the increase in long-term employment opportunities associated with new jobs generated by the proposed project.

Construction

The proposed project would create short-term construction employment in the City of Downey. As described in Section 2.0 (Project Description), the overall project has two components and would be constructed in several phases: the Downey Landing, L.L.C. project would be constructed in three phases and the Kaiser project in three phases. Construction workers are expected to be available in the local area, and it is assumed that a portion of the workers would be involved in all project construction phases, thereby decreasing the total size of the construction workforce. Construction-related activities would therefore have a negligible impact on population and housing resources. In addition, the creation of service and construction jobs would create opportunities for unemployed workers, which is considered a growth-inducing impact.

Projected Employment

Based on conservative employment generation rates for the uses proposed (an average of one employee per 300 gross square feet), the Downey Landing, LLC project, at approximately 2.1 million square feet (s.f.), would generate just about 7,100 jobs, in total, in about the following distribution:

- Area I: 900 employees (1 employee/550 s.f. for retail, 1/885 s.f. for large-format retail, and 1/175 s.f. for restaurant uses);
 - Area II A: 1,778 employees (an average of 1/250 s.f. for office uses);
and

- Area IIB: 810 employees (an average of 1/300 s.f. for office and light industrial uses); and
- Area IIC: 1,539 employees (an average of 1/250 s.f. for office and uses); and
- Area IID: 2064 employees (an average of 1/250 s.f. for office uses)
-

The proposed Kaiser project (Area IV) is anticipated to generate an overall employee population of approximately 2,437 persons:

- Medical Office Buildings: 732 employees (1 employee/250 s.f. for office use)
- Central Plant: 5 employees
- Hospital Tower: 1,700 employees (2.5/1,000 s.f. for medical facility use)

Housing Demand

While approximately 9,537 new employees are expected at the proposed project, the number that will ultimately reside in Downey cannot accurately be predicted. Because a portion of Kaiser's proposed facility is a replacement for a facility in a neighboring jurisdiction, it is expected that fewer employees would relocate their residences. Further, as described in Section 3.7-5 (Population and Housing: Impacts), the City's current General Plan Housing Chapter assumed development of the project site at a greater intensity than what the project proposes, and computed housing needs and growth accordingly. These projections were, in turn, incorporated into SCAG's Regional Comprehensive Plan and Guide and Regional Housing Needs Assessment. Therefore, although the proposed project would create a demand for housing, this need was anticipated by the existing plans and policies of the City of Downey.

5.2 Summary of Cumulative Impacts

CEQA Guidelines Section 15130(a) states that, "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in [CEQA Guidelines] Section 15065(c)." This discussion, as stated in CEQA Guidelines Section 15130(b), "should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute, rather than the attributes of other projects which do not contribute to the cumulative impact."

In accordance with CEQA Guidelines Section 15130(b)(1)(B), the cumulative impact analysis for the proposed project is derived from a list of pending, approved, and reasonably foreseeable projects within the City of Downey, and other Cities within the Gateway Cities Subregion. This EIR also addresses cumulative traffic effects based on land use data and development projections included in the Los Angeles County CMP as well as other local and regional impact considerations.

For most issue areas, the geographic area affected by the cumulative impact analysis is the City of Downey, with the following exceptions:

- Aesthetics: The project site and adjacent residential uses;
- Traffic: Regional (per the Los Angeles County Congestion Management Plan);
- Population and Housing: Gateway Cities Subregion.

The proposed project will result in the **cumulatively considerable impacts** listed below, by issue area.

Aesthetics

The proposed project would contribute to the exposure of City residents to increased nighttime light and glare intensities.

Transportation and Traffic

Traffic generated by the proposed project would result in a significant unavoidable adverse impact on the Century Freeway (I-105) between Bellflower Boulevard and the I-605 Freeway during the morning and afternoon peak hours based on the criteria in the LA County Congestion Management Program (CMP).

The cumulative impacts of general area-wide growth and traffic that would be generated by other proposed development projects in the study vicinity and the proposed project's contribution to the cumulative impacts have been addressed in Section 3.9.5. The traffic, parking, and truck-related impacts during construction could potentially be exacerbated by the cumulative effects of other construction projects in the area if the construction schedules were to overlap. The expanded Kaiser facilities will result in an increase the amount of traffic on Bellflower Boulevard, Imperial Highway, and surrounding arterials, which will exacerbate the cumulative effects of traffic as a result of the proposed project.

5.3 Significant, Irreversible Environmental Changes

Section 15126.2(c) of the State CEQA Guidelines requires a discussion of any significant irreversible environmental changes, which would be caused by the proposed project. Specifically, Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts, and particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The construction and implementation of the proposed project will entail the commitment of energy and human resources. This commitment of energy, personnel, and building materials will be commensurate with that of other retail centers, business park development projects, hospitals, and medical office buildings of similar magnitude. Manpower will also be committed for the construction of buildings and the upgrading and maintenance of public facilities necessary to support the new development.

Ongoing maintenance and operation of the project will entail a further commitment of energy resources in the form of petroleum products (diesel fuel and gasoline), natural gas, and electricity. Long-term impacts would also result from an increases in nighttime light levels, air pollutant and noise emissions from the project, vehicular traffic, public services use, and infrastructure needs. This commitment of resources will be a long-term obligation in view of the fact that, practically speaking, it is impossible to return the land to its original condition once it has been developed, and the likelihood of such a return is almost zero. In summary, implementation of the proposed project would involve the following irreversible environmental changes to existing on-site natural resources:

- Commitment of energy and water resources as a result of the operation and maintenance of the proposed development; and
- Alteration of the existing character of the site.

However, the significant irreversible environmental changes are consistent with the City's intended uses for the site, as demonstrated in the City of Downey's General Plan designation for the site.

5.4 Significant, Unavoidable Adverse Impacts

According to the CEQA Guidelines Section 15126.2(b),

Significant Environmental Effects Which Cannot Be Avoided if the Proposed Project is Implemented. Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

Environmental impacts associated with implementation of a project may not always be mitigated to a level considered less than significant. In such cases, a Statement of Overriding Considerations must be prepared prior to approval of the project, and in accordance with CEQA Guidelines Sections 15091 and 15093. Because implementation of the proposed project would create significant, unavoidable impacts to air quality, aesthetics, and transportation/traffic, as further described, a Statement of Overriding Considerations will be prepared to describe the specific reasons for approving the project based on information contained within the Final EIR, as well as any other information in the public record.

The following are significant, unavoidable adverse impacts that would result from project implementation. A detailed discussion of each of the impacts can be found in Chapter 3 (Environmental Analysis), under the appropriate issue area sections.

3.1 Aesthetics

The proposed project would introduce a substantial source of nighttime light into the project vicinity.

3.2 Air Quality

Impacts resulting from daily demolition and construction emissions as well as daily operational emissions would be significant and unavoidable.

3.9 Transportation and Traffic

Traffic generated by the proposed project would result in a significant unavoidable adverse impact on the Century Freeway (I-105) between Bellflower Boulevard and the I-605 Freeway during the morning and afternoon peak hours based on the criteria in the LA County Congestion Management Program (CMP).

6.0 Organizations and Persons Consulted/ List of EIR Preparers

6.1 Organizations and Persons Consulted

The following organizations and persons were contacted for information during the preparation of this EIR:

**TABLE 6-1
ORGANIZATIONS AND PERSONS CONSULTED**

Name	Agency/Organization
Michelle Afonin	Calsan
Desi Alvarez, Public Works Director	City of Downey
Alfred Aquado	Southern California Edison
Nancy Burke	Kaiser
William Davis, Business Development Manager	City of Downey
Scott Dinovitz, Project Manager	Woodland Construction Company
Mark Dryer, Captain	Downey Police Department
Greg Even	Los Angeles County Department of Public Works
Steven G. Fox, Program Manager, Regional Planning	Los Angeles Metropolitan Transportation Authority
Ruth Frazen, Engineering Technician	County of Los Angeles, Sanitation District
Darrell George, Economic Development Director	City of Downey
Douglas Gray, President	Downey Landing, LLC (formerly) Ezralow Retail Properties
Thomas Gray	Thomas Gray and Associates, Inc.
Jim Herrington	Kaiser
David Hickens	NASA, Johnson Space Center
Harlan R. Jeche, Unit Chief	California Department of Toxic Substances Control
Kris Keas, Technical Supervisor	Southern California Gas Company
Anthony M. La, P.E., Principal Civil Engineer/ City Traffic Eningeer	City of Downey
Frank McDonnell, Water Quality Technician	City of Downey
Lucy McGovern	Central Basin Municipal Water District
Scott Morgan, Project Analyst, State Clearinghouse	Governor's Office of Planning and Research
Don Morris	General Telephone Company
Indrajit Obeysekere, Attorney	Kaiser
Terry Pruitt, Lieutenant	Downey Police Department
Brian Raglund, Principal Civil Engineer	City of Downey
David Rodriguez, Contract Planner	City of Downey
Robert Rowe, Deputy Fire Marshall	Downey Fire Department
Thomas Ruby, Attorney	Morrison and Forrester
Mark Ruffner	Evergreen
Mark Schoeman, AIA	HMC Architects
Mark Sellheim, Principal Planner	City of Downey
Laura J. Simonek, Principal Environmental Specialist	Metropolitan Water District of Southern California
Jeffery M. Smith, AICP, Senior Planner	Southern California Association of Governments

TABLE 6-1
ORGANIZATIONS AND PERSONS CONSULTED

Name	Agency/Organization
Steve Smith, Ph.D., Program Supervisor, CEQA Section	South Coast Air Quality Management District
Paula Stayshak	Kaiser Bellflower EBS
Ed Stewart	Clayton Group
Dr. Edward Sussman	Downey Unified School District
Tony Vasquez, Public Works Supervisor II	City of Downey
Robert Warth	Southern California Gas Company
Craig Williamson, Senior Architect	Bastian and Associates
Rob Wood, Associate Governmental Program Analyst	Native American Heritage Commission
Ron Yoshiki, City Planner	City of Downey

6.2 List of EIR Preparers

This EIR was prepared by EIP Associates, under contract to the City Downey. Because no one individual can be an expert in all of the environmental analysis presented in this EIR, an interdisciplinary team, consisting of technicians and experts in various issue areas, was required to prepare and complete this study. Assisting EIP Associates in this task were Stevens-Garland Associates, MCE Consulting Engineers, City of Downey staff members, and the Project Applicant. The following specific organizations, agencies, and persons were directly involved in the preparation of this EIR.

TABLE 6-2: LIST OF EIR PREPARERS

Name	Role
<i>EIR Consultant: EIP Associates</i>	
Wendy Katagi	EIR Project Manager
Neill Brower	EIR Deputy Project Manager
Rhett Beavers	Specific Plan Project Manager
Michael Brown	Noise and Air Specialist
Alison Rondone	Section Author
Christy Loper	Environmental Planner
Kelsey Bennett	Environmental Planner
Susan Zagrodny	Section Author
Joel Miller	Production Coordinator
John Spranza	Associate Manager
Scott Wirtz	Environmental Planner
<i>EIR Subconsultants: Stevens-Garland Associates</i>	
Richard Garland, P.E.	Traffic Engineer
<i>EIR Subconsultants: MCE Consulting Engineers</i>	
Tom Carcelli, P.E.	Hydrology and Infrastructure Technical Report Author
Richard Moore, P.E.	Hydrology and Infrastructure Technical Report Author

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