Draft Environmental Impact Report

for the

MIDTOWN MILPITAS SPECIFIC PLAN

CITY OF MILPITAS

SCH# 2000092027

October 2001

SUMMARY

This summary presents an overview of this environmental analysis of the Midtown Milpitas Specific Plan, which is contained in further detail in Chapter 3 of this Draft Environmental Impact Report (EIR). Section 15123 of the State CEQA Guidelines requires that an EIR summary identify the following: (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect, (2) areas of controversy known to the Lead Agency including issues raised by agencies and the public, and (3) issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.

PROJECT UNDER REVIEW

This Draft EIR has been prepared to provide an environmental assessment of the proposed Midtown Milpitas Specific Plan, which is a long-range land use and development plan for a 942-acre area in the City of Milpitas. The Specific Plan area encompasses land near the western limits of Milpitas, generally bounded by the Union Pacific Railroad lines on the east and north, Abel Street and the Elmwood Rehabilitation Center on the west; and the City limits to the south. The Midtown area is traversed by two Union Pacific Railroad lines. Main Street is the central north-south roadway in the planning area.

The proposed Midtown Milpitas Specific Plan provides development goals and land use directives for the Midtown area for a 20-year planning horizon. Included in the Midtown Milpitas Specific Plan are the following: proposed land use designation changes; a development strategy; recommended public and private improvements; and urban design recommendations, including new development regulations and guidelines.

A detailed project description is provided in Chapter 2 of this Draft EIR.

AREAS OF CONTROVERSY / ISSUES TO BE RESOLVED

The City issued an Initial Study and a Notice of Preparation (NOP) on September 5, 2000, which is included as Appendix A to this EIR. In addition, the Specific Plan was developed through a City-directed planning process that included property and business owners in the area, as well as the larger community. The potential for increased vehicular traffic and the potential for congestion were raised as issues of concern. No other areas of controversy with regard to environmental issues were raised through these outreach efforts. Similarly, there are not any known issues that were discovered through the environmental review process that are in need of resolution.

SIGNIFICANT ENVIRONMENTAL IMPACTS

According to the CEQA Guidelines, a "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (Section 15382). In determining whether or not the proposed Specific Plan has the

potential to result in a significant impact to the environment, the questions or "thresholds of significance" provided by the State's Environmental Checklist Form (Appendix G of the CEQA Guidelines) were used. These thresholds are provided within each topical section of this EIR prior to the environmental evaluation. In addition, the environmental evaluation in this EIR uses local regulations as thresholds of significance, where applicable.

Implementation of the Milpitas Specific Plan has the potential to generate environmental impacts. Impacts related to the following environmental topics could be significant without the implementation of mitigation measures, but would be reduced to a less-than-significant level if the mitigation measures recommended in this report are implemented:

- Hazardous Materials
- Utilities (Wastewater Effluent Capacity)
- Biological Resources
- Cultural Resources
- Traffic and Circulation
- Air Quality

These impacts are provided in the summary table, which is presented at the end of this chapter.

UNAVOIDABLE SIGNIFICANT EFFECTS

State CEQA Guidelines Section 15126(b) requires an EIR to "describe any significant impacts, including those that can be mitigated but not reduced to a level of insignificance." Chapter 6 provides a summary of the unavoidable significant impacts that are anticipated with the project. These include impacts to the following resource areas:

- Traffic and Circulation
- Air Quality

These impacts are also summarized in the table at the end of this chapter. Unavoidable adverse impacts would require a Statement of Overriding Considerations if the project were to be approved by the City.

ALTERNATIVES TO THE PROJECT

CEQA requires the Lead Agency to consider alternatives to the proposed Specific Plan that meet the Specific Plan's basic objectives, while avoiding or reducing significant impacts. The following alternatives are considered in Chapter 7 of this EIR:

- No Project Alternative - Existing General Plan Land Use Designations
- Higher Residential Development Alternative
- Lower Density Alternative

Chapter 7 of this EIR evaluates potential impacts associated with the Specific Plan alternatives in accordance with Section 15126(d) of the CEQA Guidelines.

CEQA also requires the identification of the environmentally superior alternative. Based on the information contained in Chapter 7, the Lower Density Alternative is the environmentally superior alternative. This is because it reduces wastewater outflows and slightly reduces the vehicle trips attributable to the Specific Plan area. In general, the selection of this alternative as the environmentally superior alternative is due in large part to the lower intensity of development envisioned. However, this alternative would continue to result in significant and unavoidable traffic and air quality impacts. Further, this alternative would not provide as much housing as the proposed Specific Plan, for which there is a substantial demand in the region. More detail on this alternative, and a comparison against the proposed Specific Plan is provided in Chapter 7.

Although the Lower Density Alternative is considered the environmentally superior alternative, CEQA does not require the Lead Agency to adopt this alternative. In short, CEQA requires that the Lead Agency adopt mitigation measures or alternatives, where feasible. The concept of feasibility encompasses the question of whether a particular alternative promotes the underlying goals and objectives of the project to the extent that these are based on a reasonable balancing of the relevant economic, environmental, social, and technological factors.

SUMMARY TABLE

The following table provides a summary of the environmental impacts of the proposed Specific Plan, the level of significance before mitigation, recommended mitigation measures, and notes the level of impact significance after implementation of the mitigation measures. Impacts are numbered in accordance with the environmental topic to which they pertain and in the order in which they appear within each EIR section. Please see Chapter 3 of this EIR for more information on the potential impacts of the proposed Specific Plan.

Summary of Impacts and Mitigation Measures

Midtown Specific Plan

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
Hazardous Materials			
Impact HazMat-1: Soil and Groundwater Contamination. Development or redevelopment of properties within the Midtown planning area could expose construction workers and/or the public to hazardous materials from existing soil and groundwater contamination during and/or following redevelopment. This is considered a potentially significant impact.	S	Mitigation Measure HazMat-1: A Phase I Environmental Site Assessment (ESA) shall be conducted in accordance with American Society for Testing and Materials (ASTM) guidelines prior to the approval of development that would involve soil disturbance within 100 feet of any parcel that has been identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, or which has had previous land uses associated with hazardous materials (e.g., industrial sites, gas stations, etc.). Additional investigation may not be necessary for sites which have no record of hazardous materials, past history of land uses associated with hazardous materials, adjacency to such sites, nor surface indications of possible hazardous materials conditions. Figure 3.3-1 provides the general locations of reported hazardous materials sites as of August 2000. For more detail, refer to the Environmental Records Search, on file with the Planning Division (EDR 2000). The Phase I ESA will include the findings of a site reconnaissance and investigation of prior uses of the property that could have resulted in contamination. If a significant likelihood of contamination is revealed by the Phase I ESA, a Phase II and/or III assessment may be required, which would involve soil and/or water quality sampling and could result in remediation requirements in accordance with State and federal regulations. Implementation of this measure will ensure that this impact is reduced to a less-than-significant level.	LTS

S = Significant; LTS = Less than Significant; SU = Significant and Unavoidable; n/a = not applicable

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
Utilities			
Impact Util-1: Effluent Treatment Capacity. Development that could occur with approval of the Midtown Milpitas Specific Plan would result in an additional 0.4 mgd dry weather peak week flow discharge to the San Jose/Santa Clara Water Pollution Control Plant (WPCP) above the discharge anticipated with the current General Plan. Cumulative growth within the City of Milpitas, could require 12.9 mgd average dry weather peak week flow of wastewater treatment plant capacity in the year 2020, with approval of the Midtown Milpitas Specific Plan. This exceeds the City's current Master Agreement (12.5 mgd dry weather peak week flow) by 0.4 mgd. The additional generation of effluent attributable to the Midtown Milpitas Specific Plan would contribute to this cumulative impact. This is considered a significant impact.	S	Mitigation Measure Util-1: The following mitigation measures shall be implemented to ensure that wastewater discharge and treatment capacities are available for planned development: a. The City of Milpitas shall continue to participate in WPCP Action Plan projects to reduce existing wastewater flows, such as low flow toilet installation programs and water conservation programs. The City of Milpitas shall continue to participate in the South Bay Water Recycling Program, and pursue additional recycled water opportunities whenever available. b. The City shall continue to monitor for adequate discharge capacity to serve existing and approved development in the city for all development projects, including remodels. The Planning Division shall continue to coordinate with the Utilities Division and require a sewer needs assessment to be completed by the developer prior to any development approvals. The Utilities Division shall continue to keep a running estimate of how much capacity remains citywide to aid in this analysis. c. The City of Milpitas shall complete the Sewer-Water Master Plan Update (Winter 2002) and implement the feasible recommended infrastructure improvements, including infiltration and inflow reduction measures. Upon completion of the Sewer Master Plan Update, the City of Milpitas shall review the treatment capacity needs and seek additional capacity if warranted. If the available treatment capacity has been reached, the City of Milpitas shall not issue the building permit until additional capacity is acquired. With the implementation of these mitigation measures, adequate wastewater treatment capacity would be ensured, and this impact would be considered less-than-significant.	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
Biological Resources			
Impact Bio-1: Burrowing Owl. New development envisioned by the Specific Plan of undeveloped lands in the planning area could result in the loss of burrowing owls or active nests, which would be a significant environmental impact.	S	Mitigation Measure Bio-1: Undeveloped areas proposed for development during the nesting season (April 15 to July 15) shall be surveyed for burrowing owls. The survey must follow the California Department of Fish and Game (CDFG) protocol. The survey report shall be submitted to Milpitas Planning Division for review and approval. If owls are observed during the surveys, or if a burrowing owl nest has been documented on the site within the last three years, a burrowing owl habitat map and mitigation plan must be prepared by a qualified ornithologist and submitted to the City for approval. Implementing this mitigation measure would reduce potential impacts to burrowing owls to a less-than-significant level.	LTS
Impact Bio-2: Raptors. Implementation of the Specific Plan could result in the loss or disturbance of active raptor nests. Breeding and nesting raptors could be negatively affected by the removal of large tress or nearby construction activity during the breeding season. This would be a potentially significant impact.	S	Mitigation Measure Bio-2: Most hawks build bulky nests of twigs, bark, and leaves high in trees. Red-shouldered hawks (the species observed in the project area) nest in deciduous or coniferous trees, usually 20-60 feet above the ground. The birds construct well-made cupped nests of sticks and twigs, lined with bark, mosses, leaves, feathers and down. A red-shouldered hawk nest is approximately 2 feet wide and 1 foot deep. For proposed projects that would remove any large tree with a potential raptor nest during the raptor-nesting season (February 1 to August 31), the following mitigation measures shall be implemented a. If construction or large tree (i.e., 20 feet or more in height) removal is proposed during the raptor-nesting season (February 1 to August 31), Planning Division staff shall conduct a site visit to determine whether any nest structure is visible in the trees to be removed.	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
		b. If a nest is observed, a focused survey shall be conducted by a qualified biologist during the nesting season to identify if they are active. The survey shall be conducted no less than 14 days and no more than 30 days prior to the beginning of construction or tree removal. c. If nesting raptors are found during the focused survey, no construction or tree removal will occur within 500 feet of an active nest (or an alternative distance deemed appropriate by the California Department of Fish and Game (CDFG), depending on the existing degree of disturbance in the vicinity of the nest) until the young have fledged (as determined by a qualified biologist). If nest trees are unavoidable, they shall be removed during the non-breeding season. Implementing these mitigation measures would reduce potential impacts to raptors to a less-than-significant level.	

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
Impact Bio-3: Waters of the United States, Including Wetlands. Development of the Elmwood site could result in loss or disturbance of wetlands. In addition, implementing the trails along the creeks identified in the Specific Plan could result in the loss or disturbance of Waters of the United States, including jurisdictional wetlands. Proposed trails are shown in Figure 2-8 of Chapter 2: Project Description. This impact is considered potentially significant.	S	Mitigation Measure Bio-3: If a project in the planning area has the potential to result in discharge of dredged or fill material into Waters of the United States, including wetlands, the following measures shall be implemented. Waterways in the planning area that could be Waters of the United States are Berryessa Creek, Lower Wrigley Ford Creek, and East Penitencia Creek. a. Prior to implementation of a project in the vicinity of known waterways in the planning area, qualified biologists shall make a determination as to whether Waters of the United States, including jurisdictional wetlands, are present in the development area. If no Waters of the United States, including jurisdictional wetlands, would be filled or degraded as a result of the proposed project, no further mitigation will be required. b. If Waters of the United States would be filled or degraded as a result of the proposed project, authorization for the fills shall be secured from USACE via the Section 404 permitting process. c. The acreage of Waters of the United States removed will be replaced or rehabilitated on a "no-net-loss" basis in accordance with USACE regulations. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE. d. Measures to minimize erosion and runoff into drainage channels shall be included in all drainage plans and implemented during construction adjacent to creeks. Implementing these mitigation measures would reduce potential impacts to Waters of the United States, including wetlands, to a less-than-significant level.	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
Cultural Resources			
Impact Cult-1: Reduction of Historic Significance. Implementing the Specific Plan may cause a substantial adverse change in the significance of historic resources through demolition or alteration. Historic resources include locally-designated resources and those identified as potentially significant in the Historic Sites Inventory (Milpitas 1990).	S	Mitigation Measure Cult-1: The following mitigation measures shall be implemented to ensure that substantial adverse changes do not occur to historical resources within the planning area. These measures shall be implemented when modification or demolition is proposed for any of the sites identified on Figure 3.8-1. a. Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, or reconstruction of the historic resource would be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstruction Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historic resource shall be considered mitigated to a less-than-significant level. This is the preferred mitigation approach. b. If removal or modification of any potentially significant resource is proposed and is not consistent with the Standards described in (a), the resource shall be evaluated for its integrity and structural values pursuant to the California Register criteria by a licensed architect specialized in historic buildings. This shall occur prior to the approval of any proposed modification or demolition. c. If these resources are determined ineligible for the California Register of Historic Resources, no further mitigation is required. However, if a resource is listed or determined eligible for the California Register of Historic Resources, documentation of the structure's architectural values by a licensed architect specialized in historic buildings shall be completed prior to demolition or alteration. At least one additional mitigation measure also will be	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
		implemented at the recommendation of the architect in consultation with the City of Milpitas; this might include on-site interpretation of the lost resource or documentation of the resource to Historic American Building Survey/Historic American Engineering Recordation (HABS/HAER) standards. Implementation of these mitigation measures would reduce the potential impacts to historic resources to a less-than-significant level.	
Impact Cult-2: Potential Impacts to Known Archaeological Sites. Known archaeological resources in the vicinity of Penitencia Creek (site CA-SCL-38) may be adversely affected by a planned bicycle and trail system identified in the Specific Plan and/or development of the vacant parcels to the north and east of the Elmwood Correctional Facility. This is considered a potentially significant adverse impact.	S	Mitigation Measure Cult-2: When proposed for development, the planned bicycle and pedestrian improvements in the vicinity of the Penitencia Creek and development of vacant lands in the vicinity of Penitencia Creek (within 100 feet of the creek bank) shall be reviewed for their potential to adversely affect archaeological site CA-SCL-38. Mitigation, including site avoidance, data recovery and/or construction monitoring may be necessary, depending on the nature of the site, and the project's potential impact to it. A qualified archaeologist shall make project-specific recommendations, which shall be implemented prior to the development of the path or construction on these vacant lands. Implementation of this mitigation measure would reduce this potential impact to a less-than-significant level.	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
Impact Cult-3: Potential Impacts to Unknown Cultural Sites. Previously undiscovered cultural resources may be encountered during construction efforts related to implementation of the Specific Plan's development program. Damage or destruction to these unknown resources prior to the assessment of their importance and development of resource-specific mitigation measures would be considered a potentially significant adverse impact.	S	Mitigation Measure Cult-3: Project developers shall be required to implement provisions for historical or unique archaeological resources accidentally discovered during construction in accordance with CEQA Guidelines Section 15064.5(e)(f). This requirement shall be specified in all building and grading permits. These provisions require the immediate evaluation of the find by a qualified archaeologist or historic archaeologist meeting the Secretary of the Interior's Professional Qualification Standards. If the find is determined to be an historical or unique archaeological resource, funding will be made available by the project developer and a schedule identified for implementing avoidance measures or appropriate mitigation. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place. Implementation of this mitigation measure would reduce this potential impact to a less-than-significant level.	LTS
Impact Cult-4: Potential Disturbance of Human Remains. Implementation of the Specific Plan may disturb unknown human remains in the planning area. This is considered a potentially significant adverse impact.	S	Mitigation Measure Cult-4: In the event that human remains are encountered, City planning staff will be contacted and excavation or disturbance activities at the site or at any nearby area reasonably suspected to overlie adjacent human will be halted. This requirement shall be specified in all building and grading permits. The Santa Clara County coroner will be contacted and appropriate measures implemented. These actions would be consistent with the State Health and Safety Code Section 7050.5, which prohibits disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery. If the County coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
		The most likely descendent may make recommendations to the landowner for the person responsible for the excavation work, for means of treating or disposing of, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. Implementation of this mitigation measure would reduce this potential impact to a less-than-significant level.	
Traffic and Circulation			
Impact Traffic-1: Unacceptable Intersection Operations (Baseline+Project). Implementation of the proposed Midtown Milpitas Specific Plan would result in significant traffic impacts at fourteen (14) intersections in and surrounding the Midtown planning area. Of these intersections, nine (9) intersections would be significantly affected by project traffic in the AM peak hour, and eleven (11) intersections would be significantly impacted in the PM peak hour. A summary of these impacts is provided in Table 3.9-13.	S	Mitigation Measure Traffic-1: With implementation of the Specific Plan the City shall implement the improvements summarized in Table 3.9-13, consistent with Policy 4.8 of the Draft Midtown Milpitas Specific Plan. Historically, the City has required development to pay its pro-rata share of improvement costs on a project by project basis. The City shall continue to use this approach or identify alternative funding mechanisms such as RDA funds or General Funds prior to development in Midtown. Improvements may be phased, according to actual development and the demonstrated need for the improvements. With the implementation of the traffic improvements specified in Table 3.9-13 (Draft EIR), six of the intersection impacts would be mitigated to a less than significant level. However, impacts at eight of the intersections would still be considered significant. Feasible mitigation measures are not available. Thus these remaining are considered significant and unavoidable.	SU

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
Impact Traffic-2: Unacceptable Freeway Operations (Baseline+Project). The addition of traffic from the proposed Midtown Specific Plan under Baseline Conditions would exacerbate already unacceptable traffic operations at impacts on one (1) of the ten (10) study freeway segments intersections during the AM peak hour and all ten (10) segments (one or both directions) during the PM peak hour. These changes are considered a significant impact.	S	Mitigation Measure Traffic-2: According to VTA policy direction, mitigation measure for regional freeway impacts is participation in the Countywide Deficiency Plan (CDP) prepared by the VTA, which would require additional impact fees to provide for regional roadway improvements, including freeways. However, the CDP has not received final approval. Thus, the mitigation of regional impacts to freeway operations cannot be guaranteed, as the City of Milpitas does not have legal authority to mitigate freeway impacts. For this reason, the contribution of development under the Milpitas Specific Plan to unacceptable freeway operations is considered a significant and unavoidable impact.	SU
Impact Traffic-3: Future Conditions - Unacceptable Roadway Segment Operations. The addition of traffic from the proposed Midtown Specific Plan under Cumulative Conditions would significantly exacerbate AM peak hour operations on 10 roadway segments that are projected to operate at unacceptable levels under the current General Plan. The project would also cause two segments to degrade from LOS D or better (under the current General Plan) to LOS E or F. During the PM peak hour, development within the Midtown area is expected to significantly exacerbate operations on 10 of the 35 study roadway segments and cause two additional segments to operate unacceptably. Tables detailing these impacts are provided in Appendix E of the Draft EIR. These changes are considered a significant impact.	S	Mitigation Measure Traffic-3: The City of Milpitas has taken on the administration and construction of widening Montague Expressway between Great Mall Parkway-Capitol Avenue and I-680. This widening includes the addition of a fourth through lane in each direction, one of which will be a dedicated HOV lane during the AM and PM peak commute periods. Although this improvement will not reduce the projected impacts to a less-than-significant level, it will reduce overall congestion and improve traffic flow in the Midtown Area. The VTA, Santa Clara County Roads and Airports Department, City of Santa Clara, City of San Jose, and the City of Milpitas recently completed a plan line study and operations analysis to assess the right-of-way, design, and cost issues to widen the remaining section of Montague Expressway from Highway 101 in San Jose to Great Mall Parkway-Capitol Avenue in Milpitas. At this time, funding for this project has not been obtained; however, the agencies listed above are preparing a financing plan to pay for the improvements.	SU

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
		No mitigation measures are considered feasible for any of the other roadway segments; however, historically the City has required development to pay its pro-rata share of improvement costs toward improvements on a project by project basis. All of those segments projected to operate at unacceptable levels under the current General Plan will do so because no feasible mitigation measure can be implemented to increase vehicle capacity. All of these roadways are already built out and cannot be widened within the existing right-of-way. The secondary impacts of widening these roadways, which include right-of-way acquisition and demolition of existing buildings, is expected to result in a greater negative impact on the environment than accommodating the additional congestion. This impact is considered significant and unavoidable.	
Air Quality			
Impact Air-1: Construction-Related Air Emissions from Development of the Midtown Milpitas Specific Plan. Construction activities associated with the proposed development would temporarily produce new air emissions. Emissions would vary substantially from day-to-day and could potentially produce substantial amounts of PM10. The Specific Plan does not include BAAQMD PM10 construction control measures. Because construction significance is determined by means of whether BAAQMD PM10 construction mitigation measures are implemented, construction emissions is a short-term significant air quality impact.	S	Mitigation Measure Air-1: The following basic control measures are required to be implemented at all construction sites in the Midtown area. These measures shall be incorporated into construction contracts for projects in the Midtown area. a. Water all active construction areas twice daily and more often during windy periods. Active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers or dust palliatives. b. Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard. c. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
		d. Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites. e. Sweep streets daily (preferably with water sweepers) if visible soil material is carried on to adjacent public streets. f. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas. g. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.). h. Limit traffic speeds on unpaved roads to 15 miles per hour. i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways. j. Replant vegetation in disturbed areas as quickly as possible. k. Suspend excavation and grading activity whenever the wind is so high that it results in visible dust plumes despite control efforts. After implementation of the listed mitigation measures, construction-related air emissions would be less-than-significant.	
Impact Air-2: Long-term Regional Air Emissions from Development of the Midtown Milpitas Specific Plan. Based on the modeling conducted, the Specific Plan would generate approximately 127 tons per year of ROG, 159 tons per year of NOx, and 63 tons per year of PM10. The estimated increases in regional emissions would exceed the BAAQMD's annual significance threshold of 15 tons per year for each of the regional criteria pollutants. This is a significant impact.	S	Mitigation Measure Air-2: The Specific Plan contains policies directed at reducing vehicle miles traveled. The Specific Plan encourages a compatible mixture of land uses, provides for a land-use mix that supports major transit facilities, locates higher density development around hubs and commercial centers, provides for the continuation of pedestrian-oriented retail development, and provides pedestrian connections between the transit stations and important destinations. Though these policies would help to reduce emissions, they would not reduce them to a level of insignificance. Due to the intensity of the	SU

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation
		development proposed, the proposed Specific Plan could not be feasibly developed without an increase in air emissions above the significance thresholds of 15 tons per year for ROG, NOx, and PM10. This impact is considered significant and unavoidable.	
Impact Air-3: Cumulative Long-term Regional Impacts. Implementation of the proposed Specific Plan would generate cumulative regional mobile source emissions associated with increased vehicle use and residential emissions. Direct and indirect emissions produced by the proposed project would cumulatively contribute to existing and projected exceedances of the State and federal air quality standards in the air basin. This is a significant impact.	S	Mitigation Measure Air-3: Due to the intensity of the development proposed, the Specific Plan could not be feasibly developed without causing an increase in regional emissions, and all feasible mitigation measures have been incorporated into the Specific Plan as policies (e.g., policies directed at encouraging non-automotive transportation). This impact is considered significant and unavoidable.	SU

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CHAPTER I. INTRODUCTION

This Draft Environmental Impact Report (EIR) assesses the environmental impacts of the Midtown Milpitas Specific Plan - a proposed long-range plan for a 942-acre area in the City of Milpitas - and related actions including a General Plan Amendment and zoning changes. This Draft EIR has been prepared pursuant to CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.), as amended. CEQA requires that all State and local government agencies consider the environmental consequences of projects over which they have discretionary authority.

This EIR has been prepared as a program EIR, which may be prepared for a project characterized as a series of actions that involve the issuance of rules, regulations, or plans (CEQA Guidelines, Section 15168(a)(3)). This EIR analyzes the potential environmental impacts associated with adoption of the Specific Plan and the subsequent implementation of projects considered in the planning area. This EIR may be incorporated by reference by any subsequent environmental analysis (Initial Study or EIR) for a development project in the Specific Plan area. This EIR also may be used to determine the need for a subsequent EIR for a project that may have significant impacts that were not analyzed in this program EIR.

I.1. EIR PURPOSE

This EIR is a public document that discloses the significant environmental impacts of a project and measures to reduce or avoid these effects; significant impacts that cannot be avoided; growth-inducing impacts; effects found not to be significant; and significant cumulative impacts of the project when considered with past, present, and reasonably foreseeable future projects. Additionally, this EIR addresses alternatives that may reduce or avoid potential environmental impacts.

This EIR is an informational document used in the decision-making process. It is not the purpose of an EIR to recommend whether a project should or should not be implemented; rather, its purpose is to disclose the environmental effects of a project. CEQA requires the decision-makers to balance the benefits of a proposed project against its environmental consequences. The public agency shall consider information in an EIR along with other information that may be presented to the agency.

I.2. EIR FOCUS

The focus of this Draft EIR for the Midtown Milpitas Specific Plan was established by the City of Milpitas after carrying out an Initial Study. The City completed a Notice of Preparation (NOP) and Initial Study on September 5, 2000, which is included as Appendix A to this EIR. The EIR evaluates the environmental impacts from implementation of the Specific Plan determined in the Initial Study to be potentially significant.

Issues addressed in this EIR include the following:

1. Aesthetics
2. Geology, Soils, and Seismicity
3. Hazardous Materials
4. Hydrology and Water Quality
5. Utilities
6. Public Services (including parks and recreation)
7. Biological Resources
8. Cultural Resources
9. Traffic and Circulation
10. Air Quality
11. Noise

I.3. ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

In accordance with Section 15063 of the CEQA Guidelines, the following resource topics were identified as "not significant" or "less-than-significant" in the Initial Study (Appendix A), and are not addressed in this EIR. Each of these resource topics are discussed individually in the Initial Study, including a description of why significant environmental impacts are not anticipated.

1. Agricultural Resources. The majority of the Specific Plan planning area is urbanized, with the exception of an area immediately west and north of the Elmwood Rehabilitation Center. The Milpitas General Plan identifies that this area is not important agricultural or farmland. Existing zoning designations in the planning area do not include any lands designated for agricultural uses.

2. Land Use and Planning. The development proposed by the Specific Plan would not physically divide an established community. It would encourage transit, pedestrian, and bicycle use so that connections between communities would be improved. There are no conservation plans applicable to the planning area. Local, regional, and State policies regarding biological resources, air quality, noise and public service provisions are examined in this Draft EIR in each applicable environmental section.

3. Mineral Resources. The planning area does not contain any known important mineral resources, as delineated by the Milpitas General Plan or the California Division of Mines and Geology.

4. Population and Housing. The Specific Plan allows for new housing areas, but does not directly displace existing housing or displace substantial numbers of people. However, the redesignation of the Johnsville Mobile Home Park property in the southern portion of the Midtown area to a higher density residential designation (41 to 60 dwelling units per acre) could accelerate the redevelopment of this property. The population growth resulting from the proposed new housing, and the environmental implications of this growth are addressed in the following chapters of this Draft EIR: Geology, Soils and Seismicity, Utilities, Public Services, Traffic and Circulation, Air Quality, and Noise.

I.4. REPORT ORGANIZATION

This Draft EIR is organized into the following chapters:

- **Chapter I: Introduction.** This chapter provides an introduction and overview describing the focus of this EIR and the environmental review process.
- **Chapter 2: Project Description.** This chapter describes the planning area characteristics, the proposed land development program and other improvements proposed by the Specific Plan, the project location, uses of the EIR and project objectives.
- **Chapter 3: Environmental Evaluation.** This chapter describes the current conditions relative to the environmental issues to be reviewed, identifies thresholds of significance based upon Appendix G of the CEQA Guidelines, evaluates the potential environmental impacts associated with implementation of the Midtown Milpitas Specific Plan, and identifies mitigation measures to reduce or avoid any identified significant impacts.
- **Chapter 4: Cumulative Impacts.** This chapter provides a summary of impacts created as a result of the combination of the Specific Plan impacts with those associated with other approved projects in the development area.
- **Chapter 5: Growth Inducement.** This chapter provides a discussion of whether the proposed Specific Plan would induce growth and the community service and infrastructure implications of induced growth.
- **Chapter 6: Other CEQA-Required Conclusions.** This chapter provides discussion of the following CEQA-mandated mandatory conclusions: unavoidable significant effects, and significant irreversible environmental changes.
- **Chapter 7: Alternatives to the Specific Plan.** This chapter considers alternatives to the Specific Plan, including an analysis of the No Project Alternative, as required by CEQA.
- **Chapter 8: Report Preparation and References.** This chapter identifies the references, organizations and persons consulted, and preparers of this Draft EIR.

I.5. ENVIRONMENTAL REVIEW PROCESS

Draft EIR: The City of Milpitas has filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research, State Clearinghouse and the County Clerk indicating that this Draft EIR has been completed and is available for review and comment.

Public Review: This Draft EIR will be available for review by the public and interested parties, agencies and organizations for a 45-day review period, as required by California law. The public review period begins on October 8, 2001 and ends on November 21, 2001. A public hearing on the Draft EIR will be held during the public review period. The public is invited to attend the hearing to offer oral comments on the Draft EIR.

Comments on the Draft EIR also may be submitted in writing during the 45-day public review period to:

Ms. Marina Rush
Planning and Neighborhood Preservation
City of Milpitas
455 E. Calaveras
Milpitas, CA 95035
Phone: (408) 586-3272
Fax: (408) 586-3293
TDD: (408) 586-3013
email: mrush@ci.milpitas.ca.gov

In reviewing the Draft EIR, reviewers should focus on the document's adequacy in identifying and analyzing significant effects on the environment, and ways in which the significant effects might be avoided or mitigated.

Response to Comments (Final EIR): Following the close of the 45-day public comment period, responses to comments on the Draft EIR will be prepared and published as a separate document. The Draft EIR text and appendices, together with the responses to comments document, will constitute the Final EIR. The Final EIR will be available prior to the consideration for recommendation by the Milpitas Planning Commission and prior to the consideration of certification by the Milpitas City Council.

Certification of the Final EIR: Prior to approving the project the Milpitas City Council, as the decision-making body of the CEQA Lead Agency, must certify the following:

- The Final EIR has been completed in compliance with CEQA;
- The Final EIR was presented to the City Council;
- The City Council reviewed and considered the information contained in the Final EIR prior to approving the project; and

- The Final EIR reflects the City's independent judgment and analysis (CEQA Guidelines Section 15090).

After the City Council certifies the Final EIR, the Council will consider the Specific Plan itself, which may be approved or denied. If the Specific Plan is approved, the Council may require mitigation measures identified in the EIR as conditions of the Specific Plan approval. Alternatively, the Council could require other mitigation measures deemed to be effective measures for the identified impacts, or it could find that the mitigation measures cannot be feasibly implemented.

Mitigation Monitoring Program: In order to ensure that the mitigation measures and project revisions identified in the Final EIR are implemented, the City will adopt a program for monitoring and reporting on the revisions that it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. The mitigation monitoring program (MMP) will identify when each mitigation measure will be implemented, the agency or City department responsible for assuring compliance, and the method of implementation.

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CHAPTER 2. PROJECT DESCRIPTION

This chapter describes the policies and land use development programs that would be implemented as a part of the proposed Midtown Milpitas Specific Plan. In accordance with CEQA Guidelines Section 15124, the project description also includes the regional and local project location, a statement of the project objectives, and a brief description of the intended uses of the EIR. All figures, including those illustrating the land use, circulation, and infrastructure components of the Specific Plan, are located at the end of this chapter.

2.1. PLANNING AREA LOCATION AND BOUNDARIES

The Midtown Milpitas planning area (planning area) is located in the City of Milpitas, California in the larger South San Francisco Bay Area (Figure 2-1) or the "Silicon Valley" region. Located between San Jose and Fremont, Milpitas is situated astride the "Golden Triangle" of San Jose, an area slated for high technology job growth. The planning area encompasses approximately 942 acres near the western City limits, that is generally bounded by the Union Pacific Railroad lines on the east and north, Abel Street and the Elmwood Rehabilitation Center on the west; and the City limits to the south (Figure 2-1). Two Union Pacific Railroad lines traverse the planning area. The surrounding areas are predominantly urban in nature and are dominated by a variety of land use and building types, as described below.

West of the Planning Area

Land uses to the west and southwest of the planning area are dominated by single family low density residential neighborhoods (Pines and Summerfield). These areas are distinct from the planning area because they are separated by physical barriers, such as broad arterials (Abel Street) and soundwalls. Interstate 880 also forms the western boundary of certain portions of the planning area.

East of the Planning Area

The Union Pacific Railroad tracks form most of the eastern boundary of the Midtown area. Uses across the tracks are primarily light industrial, office, and manufacturing uses and a small, medium density residential neighborhood. The commercial uses are generally low-rise, large footprint buildings with surface parking. In addition, single family housing is located east of the planning area, as is Highway 680.

South of the Planning Area

The City of San Jose is located directly south of the planning area. Land uses on the south side of the Montague Expressway include large, low-rise industrial parks with surface parking, and single family residential near Capitol Avenue.

2.2. PLANNING AREA CHARACTERISTICS

Existing Land Uses

The dominant land use in the Midtown Milpitas planning area include industrial and commercial uses, such as automobile services, building materials and storage yards and facilities, retail development, and research and development/industrial uses. Collectively these uses account for almost half of the planning area. The planning area has a large component of public and semi-public uses, including publicly owned facilities, such as the Elmwood Rehabilitation Center, but also privately owned public service uses such as churches, the YMCA, and child-care businesses (13 percent). Transportation related land uses, including railroad rights-of-way, railroad sidings and streets, account for another 205 acres or approximately 20 percent of the planning area. A large percentage of the planning area, 87 acres, includes undeveloped and/or vacant lands. Uses such as residential (single family homes, apartments and mobile home park), industrial, and professional office (medical and professional) account for a relatively small share of the planning area. A breakdown of the existing land uses is provided in Table 2-1. Figure 2-2 illustrates the location of these uses.

Land uses along the Main/Abel Street corridor are predominantly mixed, including retail, residential, public/semi-public uses, professional offices and service commercial businesses. Main Street is unusual in that it contains a great number of public and semi-public uses. Particularly noteworthy are the eight churches, representing a tremendous diversity of faiths and cultures, which are located along the street. Uses along South Main Street below Great Mall Parkway are dominated by automobile related services, but this area is mixed as well. There are a motel, trailer park, restaurants and child care center along this length of the street.

Beyond Main Street, other portions of the planning area tend to be more homogeneous in terms of land use. Retail uses are concentrated along the Calaveras corridor; R&D/industrial, storage and industrial uses are concentrated in the area south of Great Mall Parkway and Montague Expressway; industrial uses dominate within the railroad "triangle."

Property Ownership

There are approximately 384 parcels in the planning area that are owned by 220 individuals, agencies and associations. Overall patterns include small lot patterns in the older portion of Main Street (between Weller and Curtis Avenue) to larger parcels south of Great Mall Parkway and Montague. Several public agencies own property in the planning area, including Santa Clara County, the City of Milpitas (Senior Center, Fire Station and others), the City and County of San Francisco (Hetch-Hetchy right-of-way), and the Santa Clara Water District (creek channels). Public agency land ownership in the planning area totals 162 acres (both vacant and developed parcels). Appendix B provides more detail on property ownership within the planning area.

Table 2-I
Summary of Existing Land Uses

Land Use	Acres	Percent
Service Commercial	195.2	21
R&D/Light Industrial	141.8	15
Public/Quasi-Public	123.4	13
Residential	60.8	6
Industrial	67.4	7
Retail	39.5	4
Recreation	15.0	2
Professional Office	8.5	1
Undeveloped/Vacant	86.9	9
Subtotal	738.4	78
Railroad Rights of Way / Sidings	41.6	4
Streets	162.9	17
Total	**942.9**	**100**

Notes: Railroad rights-of-way and sidings estimated by interpretation of aerial photos. Streets estimated by subtraction.
Source: EDAW, Inc., 2001.

Redevelopment Districts

Portions of the planning area are in two separate redevelopment districts: the Great Mall Project Area and the Redevelopment Project Area Number 1 (1976), as shown in Figure 2-3.

The 140-acre Great Mall Project Area was established in 1993. The area includes the Great Mall proper and the out parcels. The redevelopment plan incorporates the City General Plan General Commercial land use designation for the site and sets forth a specific list of off-site capital projects to be implemented in the area to improve circulation.

Redevelopment Project Area Number 1 was established in 1976 to address the poor performance of the area due to flooding problems and inadequate public facilities. It was amended in 1979 and 1981 to include additional land area. The objectives of the redevelopment plan were to correct flood control hazards, traffic circulation and control inadequacies, and to encourage development of commercial and light industrial reuses of property within the area.

2.3. SPECIFIC PLAN ELEMENTS

The Specific Plan would allow future development of new commercial and residential land uses through the adoption and implementation of new zoning regulations, development standards and design guidelines, and phased capital improvements. The General Plan Amendment is required to accompany the Specific Plan. The policies in the Specific Plan provide for amendments to the Zoning Ordinance, creating or expanding a redevelopment project area, City programs (i.e., marketing and façade

enhancement) and new fees and other contractual and financial mechanisms to fund development related capital improvements and City services. Appendix A of the Midtown Specific Plan provides further discussion of the relationship of the proposed Specific Plan to the General Plan.

The Specific Plan includes six elements: Land Use, Circulation, Community Design, Utilities and Public Services, Implementation, and Development Standards and Guidelines. Based on a series of community and stakeholder meetings held during the months of January and February 2000, goals for the Specific Plan elements were drafted to guide the development of the Specific Plan. These goals were considered and approved by the Planning Commission on March 22, and adopted on April 4, 2000 by the Milpitas City Council, and are summarized below.

Land Use Element

The Specific Plan Land Use Element recognizes that the planning area is characterized by a significant amount of underdeveloped and vacant land, which when combined with the strong market for residential and employment uses, as well as the near-term availability of rail transit service in Midtown Milpitas, creates an opportunity to mend the fragmented urban pattern of the area while creating a community gathering place, reinforcing the use of alternative modes of transportation and developing stronger linkages between Midtown and Milpitas as a whole. The land use goals and policies included in the Land Use Element are intended to transform the area from its current low-intensity commercial and service-orientation into a more pedestrian-oriented mixed-use area along Main Street and predominantly high-density residential "transit-villages" around the light-rail transit stations. Figure 2-4 illustrates the proposed land use categories.

The goals of the Land Use Element are to:

1. Encourage a compatible mixture of residential, retail, office, service-oriented commercial and industrial uses within Midtown Milpitas.
2. Provide for a significant component of new housing within the area in order to: improve the vitality of the Midtown area; address local and regional housing needs; and reinforce the use of transit.
3. Promote an intensity of development in Midtown that is appropriate to its central location.
4. Provide for a land use mix that supports major transit facilities.

As discussed in Chapter 5: Growth Inducement, the Specific Plan would accommodate an additional 2,379 housing units above current dwelling unit projections for the city in 2020, or an increase of 6,400 persons based on today's average household size for multiple family units (2.69, as reported by the California Department of Finance, 1999).

Circulation Element

The Specific Plan Circulation Element recognizes that the planning area experiences severe congestion during peak hours from commuters driving to and from jobs in Santa Clara County. The existing interstate highways (I-880 and I-680), regional arterials, and railroad lines provide regional access and circulation, but create barriers to internal vehicular, pedestrian and bicycle movement. Midtown will soon

be a significant rail transit destination, providing an opportunity to focus housing and jobs around the rail transit systems. Transit, street system, and pedestrian and bicycle path plans are included in the Circulation Element, as well as illustrative street sections for Main Street, Abel Street, Great Mall Parkway, and East Curtis Street. Figures 2-10 through 2-12 illustrate the proposed planning area circulation plans.

The goals of the Circulation Element are:

1. Improve the viability of the pedestrian, bicycle and transit systems.
2. Balance the need for through movement with livability and pedestrian-orientation.

Community Design Element

The Community Design Element acknowledges that the planning area is generally characterized by a lack of visual cohesiveness, a predominance of paved surfaces with sparse landscaping, a pattern of development that is oriented to parking area and is not hospitable to pedestrians. At the same time, Midtown is an interesting part of Milpitas that can be enhanced through high-quality development that is oriented to the pedestrian and emerging transit function of the area. The intent of the element is to help guide the reinvestment of the central portion of Milpitas to create an attractive high quality built environment. New development would be punctuated by urban open spaces and linked into the larger pedestrian and bicycle system. Gateway areas would receive special attention in terms of both architecture and landscape standards. Landmarks, such as the Milpitas Senior Center, as well as public art will be woven into the fabric of the community to create interest and cultural expression. Community gateways are illustrated in the Community Design Element (Figure 2-13).

The goals of the Community Design Element are:

1. Create an attractive district that is uniquely Milpitas.
2. Establish a pedestrian-oriented mixed-use district that is centered on Main Street.
3. Provide urban open spaces (i.e., plazas, squares) that serve multiple purposes and can be used for special events.
4. Improve the character of streets within the area.

Utilities and Public Services Element

The Utilities and Public Services Element establishes policies for the upgrading and provision of utilities and public services taking into consideration the long-term development objectives for the area. The policies provide individual property owners and the City with the overall framework of improvements that will be necessary to support projected development. This element addresses water supply and distribution, recycled water, sanitary sewer, storm drainage, electrical, gas and telephone, solid waste, fire and emergency services, and school enrollment. Water system, recycled water system, sanitary sewer system, and storm drainage plans are included in this element. Figures 2-14 through 2-17 illustrate the proposed planning area utility system plans.

Implementation Element

The Implementation Element provides policies related to regulatory changes; financing of new public improvements and other actions recommended to implement the Midtown Milpitas Specific Plan. The first section of the element discusses policies related to regulatory provisions and review procedures. The second section addresses the development and financing strategy for capital improvements necessary to support new development; and the final section of the element discusses implementation programs for the planning area. These policies are intended to form an action plan for the planning area.

The goals of the Implementation Element are:

1. Identify 'catalyst' development sites.
2. Identify financial resources to create a plan that is financially self-sufficient to the extent feasible.
3. Establish the regulatory mechanisms necessary to implement the Specific Plan.

2.4. THE LAND USE PLAN

The Land Use Plan assumes completion of the 4.8-mile Tasman East/Capitol Light Rail Extension, which will link Milpitas to Downtown San Jose and Mountain View via the Tasman East line and the Guadalupe light rail transit (LRT) lines. The LRT extension includes two stations in the planning area: the Great Mall/Main Station and the Montague Station. The LRT alignment generally runs along the median of Tasman Drive and Great Mall Parkway, and will be elevated for approximately 7,200 feet to provide separation from the two railroad lines and the Montague Expressway. Both planning area stations are located on the elevated segment of the LRT alignment. The first phase of construction of the Tasman East extension (Baypointe to Milpitas I-880) has been completed and service opened in Spring 2001. The second phase of construction (including the Great Mall/Main and Montague Stations) is projected to open in Spring 2004.

In November 2000, voters in Santa Clara County voted to extend BART from Fremont or Union City to San Jose. This future extension would traverse Midtown along the eastern Union Pacific Railroad right-of-way, and provide one station at Capitol and Montague, and another in the vicinity of North Main Street.

2.4.1. LAND USE CATEGORIES

The Specific Plan proposes new land use categories that are not now in the General Plan. These new categories include Mixed Use, Multifamily Very High Density, Transit Oriented Development Overlay Zone, and Gateway Office Overlay Zone. The land use categories proposed by the Specific Plan are shown on Figure 2-4, and are as described below.

Mixed Use (FAR[1] 0.75 / 21-30 dwelling units per gross acre). This designation would allow for commercial offices, retail and services, high-density residential, and public and quasi-public uses. Mixed-use buildings could have a FAR of 0.75 for the non-residential uses and 21-30 dwelling units per gross acre. Building floorplans that include office and retail use would generally be smaller, catering to small tenants at the street level, such as shops, restaurants, personal services and offices requiring minimal square footage. Multi-family and single-family attached units, including upper story residential units, townhouses, flats, and live-work lofts would be allowed. Higher densities, 31-40 dwelling units per gross acre and 1.0 FAR, are allowed in the TOD Overlay Zones.

General Commercial. This classification would provide for a wide range of retail sales, and personal and business services accessed primarily by the automobile. It is an existing General Plan land use designation. It includes commercial uses in which shopping may be conducted by people walking to several stores as in a center, and may include uses customarily of a single-purpose character served from an adjacently parked automobile.

Retail Sub-Center. This classification accommodates neighborhood-shopping facilities that provide for convenience needs, such as groceries and minor hard good purchases. This is an existing General Plan land use classification.

Multifamily Very High Density (31-40 units per gross acre). This designation allows for new multifamily housing, including a variety of housing types, ranging from row houses and townhouses to lofts and stacked flats with structured parking. Higher densities, 41-60 dwelling units per gross acre, are allowed in the TOD Overlay Zones.

Manufacturing and Warehousing. This classification encompasses a variety of light and heavy industrial activities, such as manufacturing, packaging, processing, warehousing and distribution, and ancillary support uses. This is an existing General Plan land use classification.

Industrial Park. This classification accommodates research, professional, packaging and distribution facilities in a park-like setting.

Parks and Recreation. This classification is for land to be used for public park and recreational uses, including parks, mini-parks, trails and open space. In Midtown, the creek corridors and the Hetch-Hetchy right-of-way are in this designation. The Midtown Specific Plan also provides for the future designation of park land as new residential development is built. The precise location of these future parks is not known; however, plan policies require park land to be provided as part of new residential development.

Transit Oriented Development Overlay Zone. The Transit Oriented Development (TOD) Overlay Zone is applicable to land near the transit stations. Specific TOD standards (increased density and reduced parking requirements) would apply to land that is within the TOD Overlay Zone. There are two TOD Overlay zones in Midtown: (1) the South Midtown TOD, which would be applicable to future residential, commercial and industrial park development around the VTA's Tasman East LRT Stations as well as a future BART station at Capitol and Montague; and (2) North Midtown TOD zone which would apply

[1] FAR is the acronym for Floor Area Ratio, which is the ratio of floor area permitted on a lot to the size of the lot. Thus, a permitted Floor Area Ratio of 0.5 on a 10,000 square foot lot would allow a building whole total floor area is 5,000 square feet.

primarily to land within the Mixed Use and Manufacturing and Warehousing zones surrounding a future BART station in the vicinity of Main and Weller. Underlying districts include Multifamily Very High Density, Mixed Use, and Manufacturing and Warehousing.

Gateway Office Overlay Zone. A density bonus overlay designation could be applied to areas with an underlying commercial designation and which are well suited for a 'gateway' higher intensity office development at the threshold to the Main Street area.

2.4.2. COMPARISON OF GENERAL PLAN AND SPECIFIC PLAN LAND USE CATEGORIES

The proposed Specific Plan would increase residential land use designations and reduce industrial land use designations over the existing General Plan land use designations, as shown in Figure 2-5. The primary changes would be the introduction of the Mixed-Use category in Upper Main Street, increasing residential densities throughout the planning area, and introducing the Transit Oriented Development Overlay Zone and the Gateway Office Overlay Zone. The additional proposed amendments to the General Plan are contained in a supplement to this document.

2.4.3. LAND USE DEVELOPMENT PROGRAM

The anticipated development program provided in Table 2-2 is intended to illustrate how opportunity sites (Figure 2-7) could develop over the next 20 years in conformance with the land use policies, standards and design guidelines of the Specific Plan. The table is keyed to the planning areas illustrated in Figure 2-6. The program more fully develops the opportunity areas envisioned by the Specific Plan, including identifying a parks and open space plan for the area (Figure 2-8).

2.5. STREETSCAPE AND CIRCULATION IMPROVEMENTS

The Specific Plan proposes street improvements to be phased in conjunction with new development. The transit system plan recognizes that transit will assume greater importance in Milpitas and the region as severe traffic congestion leads commuters to seek alternatives to driving. The plan supports the efforts of the VTA and/or Bay Area Rapid Transit (BART) in developing higher levels of transit service in Santa Clara County and the region as a whole. The street system plan proposes creation of a new street near the Capitol/Montague transit station and within the railyards, and closing a portion of Carlo Street to vehicular traffic to improve traffic conditions. The pedestrian and bicycle path plan was developed with the key objective to improve pedestrian and bicycle circulation in the planning area. The Specific Plan supports the improvement of trails through the Midtown planning area as described in the Milpitas Trails Master Plan. It is assumed that these trails would be improved to provide a portion of the public parks and open space requirements for new residential development. In addition, the plan calls for a bicycle and pedestrian overcrossing of the Union Pacific Railroad tracks between Gibralter Avenue and Montague Expressway. The Specific Plan also calls for a program of streetscape improvements (including landscaping, bike lanes, lighting, benches and sidewalks) along Main Street, Great Mall Parkway, and Abel Street. Figures 2-9 through 2-12 illustrate the transit system, street system, pedestrian and bicycle plans, and streetscape improvements proposed by the Specific Plan for the planning area.

Table 2-2
Midtown Milpitas Specific Plan Development Program

Area	Residential (du)	Retail/Dining (gsf)	Office (gsf)	General Commercial (gsf)	Parks and Open Space (acres)
Calaveras Area	--	--	700,000	--	--
Upper Main Street	300	19,000	20,000	--	4
Elmwood Center	--	--	--	300,000	10
Railyards	880	--	--	--	4
South Main/Abel	1,680	32,000	--	--	3
McCandless Park	--	--	--	--	--
Montague/Capitol	2,000	10,000	--	--	5
Creek Trails	--	--	--	--	23
TOTAL	**4,860**	**61,000**	**720,000**	**300,000**	**49**

du = dwelling units (based on gross acreage)

gsf = gross square feet (based on gross acreage)

Note: Assumes development of opportunity sites (Figure 2-7) within the Midtown planning area. No redevelopment of already occupied sites is assumed. Refer to Figure 2-6 for an illustration of the boundaries of the areas in the above table. These areas have been used to assign potential impacts of anticipated development (e.g., traffic), but are not defined areas in the Midtown Milpitas Specific Plan.

Source: EDAW, Inc., August 2001.

2.6. UTILITY IMPROVEMENTS

The Midtown Milpitas Specific Plan would require improvements to the water, recycled water, sewer and storm drainage systems necessary to support projected development in the Midtown area.

Water Supply and Distribution

The water system plan proposes the following improvements to the existing water supply system to accommodate the new development in the planning area. Figure 2-14 illustrates the proposed location of these improvements.

1. Construction of a 12-inch water main within the Elmwood Surplus parcel (Pressure Zone 1), which would loop from Abel Street westerly and southerly to tie into the 14-inch Santa Clara Valley Water District line within Great Mall Parkway. The same system should be extended to the northerly boundary to connect with the 16-inch water main in the adjacent property. This improvement would be required before development of the Elmwood Surplus parcel could occur.

2. Construction of a cross connect and pressure regulator valve within Montague Expressway at Capitol Avenue, between the 10-inch Santa Clara Valley Water District line in Pressure Zone 1, and the adjacent 10-inch line in Pressure Zone 2.

Recycled Water

Recycled water is currently provided by the South Bay Water Recycling Program and is distributed by the City of Milpitas through a transmission line that bisects the planning area, adjacent to the Hetch-Hetchy right-of-way and northerly of the Elmwood area. The City anticipates extending recycled water mainlines in and around the Great Mall and the industrial parks south of the Great Mall. The southern portion of the planning area will be near existing or planned recycled water lines, therefore, the Specific Plan requires that new development in the southern portion of the planning area provide recycled water lines and convert to recycled water for irrigation as soon as feasible. Figure 2-15 illustrates the location of the proposed new recycled water pipelines in the planning area.

Sanitary Sewer

The City of Milpitas provides sanitary sewer collection service to the entire area within the municipal boundaries of the City. The collection system is comprised of a network of pipes ranging in size from 8 to 54 inches in diameter. To accommodate the additional development proposed by the Specific Plan, the following infrastructure improvements are identified for the planning area. Figure 2-16 illustrates the location of these proposed improvements in the planning area.

1. Construction of a 15-inch sanitary sewer cross-connection within Curtis Avenue, between the manhole in Main Street and the manhole in Abel Street.
2. Construction of an 8-inch sanitary sewer cross connection between the two mains in Main Street at its intersection with Carlo Street.
3. Construction of an 8-inch sanitary sewer within Railroad Avenue northerly across Wrigley Street to the northerly terminus of Railroad Court.
4. Extend the 8-inch sanitary sewer within Serra Way easterly of Calaveras Boulevard 400 feet to the east.
5. Extend the 8-inch main within Sinnott Lane to serve the northerly portion of the Railyards site.
6. Extend the existing 8-inch sanitary sewer in South Abel Street to serve the Abel and Berrueta sites.

Storm Drainage

The Specific Plan incorporates the following improvements identified in the City's Storm Drainage Master Plan. Figure 2-17 illustrates the location of these proposed improvements.

1. Construct a 24-inch storm drain from Watson Court to the existing storm drain system in Montague Expressway.
2. Construct a parallel 48-inch culvert in Wrigley Creek under Montague Expressway.

3. Widen the existing creek channel of Wrigley Creek northerly of Montague Expressway and construct a concrete U-shaped channel liner.
4. Construct a parallel 24-inch culvert in Wrigley Creek under the Union Pacific railroad tracks.
5. Construct a parallel 30-inch line from the sag in Sinnott Lane to a new outfall in Ford Creek.
6. Replace the existing twin 2.5-foot x 4-foot culverts with a 60-inch diameter culvert on Ford Creek under Railroad Avenue.
7. Construct a parallel 72-inch diameter culvert on Ford Creek under Calaveras Boulevard.
8. Widen the existing creek channel of Ford Creek northerly of Calaveras Boulevard to the northerly terminus of Railroad Court.
9. Replace the existing 30-inch storm drain pipe within Tarob Court with a 36-inch pipe and outfall into Lower Penitencia Creek.
10. Construct a 30- to 42-inch pipe system along Abel Street, northerly of Calaveras Boulevard to drain into Lower Penitencia Creek.

2.7. DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

The development standards and design guidelines implement many of the goals and policies of the Land Use and Community Design Elements of the Specific Plan. Mandatory development standards are provided for the each of the land use designations. These development standards will be included in the zoning ordinance by reference. The Development Standards and Design Guidelines Element of the Specific Plan provides a summary of the proposed land use categories and the corresponding zoning districts. Design guidelines are intended as recommendations for the architectural treatment and configuration of buildings and open space, and are intended to service as the criteria used by the City in reviewing proposed development. More detail on the proposed development standards and design guidelines in provided in the proposed Midtown Milpitas Specific Plan.

2.8. SPECIFIC PLAN IMPLEMENTATION

An amendment to the General Plan will accompany the Specific Plan. As discussed in Chapter 7 of the Specific Plan, implementation of the Milpitas Midtown Specific Plan would necessitate modifying the Zoning Ordinance, creating or expanding a redevelopment project area, and adoption of new design review guidelines and procedures.

2.8.1. MODIFY THE MILPITAS GENERAL PLAN

The Specific Plan proposes changes in land use designations, densities and permitted uses for portions of the planning area. This will entail General Plan land use map and text changes. The primary changes that are envisioned for the area include increasing opportunity for new housing development, particularly in areas that are close to transit.

The Specific Plan also provides for the following new land use designations: Mixed Use, Multifamily Very High Residential, Transit Oriented Development Overlay, and Gateway Office Overlay. The Specific Plan is consistent with many of the General Plan 1994 guiding principles in that they strive to maintain a relatively compact urban form, support a land use program that balances jobs and housing in order to reduce commuting, and provide a variety of housing that addresses a variety of needs of individuals and families.

2.8.2. ADOPT CHANGES TO THE ZONING ORDINANCE

Changes to the City's Zoning Ordinance will be required to implement the proposed Mixed Use, Multifamily Very High Residential, Transit Oriented Development Overlay, and Gateway Office Overlay land use designations.

2.8.3. REDEVELOPMENT PROJECT AREA MODIFICATIONS

The Midtown Milpitas Specific Plan includes a policy (Policy 7.1) to either form a new Redevelopment Project Area or expand Redevelopment Project Areas #1 to include a larger portion of the Midtown area. Formation of a new redevelopment project area or expansion of the redevelopment area is recommended by the Specific Plan in order to provide the financial and regulatory tools necessary to implement the Specific Plan. An evaluation will occur to determine whether it is feasible to form a new redevelopment project or amend the current Project Area #1. This decision will be determined based upon the existence of blight, as defined under the Health and Safety Code, financial feasibility, and the need to amend the existing project area for orderly planning and development.

2.8.4. ADOPT AND ENFORCE THE DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

The Specific Plan identifies a comprehensive set of development standards and design guidelines. The design guidelines are provided in Chapter 8 of the Specific Plan. These guidelines set out specific requirements for site configuration and design, site dimensions/street pattern, building type, provisions of parks, landscaping, including planting guidelines, accessway and land landscaping, refuse and recycling, mechanical equipment and utility meters, signage, lighting, and street furnishings.

2.9. PROJECT OBJECTIVES

The Specific Plan is a planning and regulatory tool available to implement the adopted General Plan (Government Code Section 65450 et seq.). Specific Plans provide an intermediate level of detail between the General Plan and individual development projects. Future public works projects, parcel maps, and zoning actions in the area of the Specific Plan would need to be consistent with the Specific Plan. The Specific Plan also will need to be consistent with the applicable elements of the General Plan. While the Specific Plan provides more detailed treatment of an area, it is ultimately a policy document that will shape future growth and investment in an area.

The Midtown Milpitas Specific Plan was developed to guide the orderly growth of Midtown Milpitas over the next 20 years; to more specifically define the nature of development and the physical framework

of the area; and to provide a basis for future implementing actions, which will involve public and private investment to improve and redevelop the area. The intent of the Specific Plan is to provide for the transition of the area to an attractive and economically vital area that accommodates a mixture of housing, shopping, employment, entertainment, cultural and recreational activities organized within a system of landscaped boulevards, streets and pedestrian linkages. The project's objectives, as defined by the CEQA Guidelines (15124 (b)) are the Goals that are defined by the Specific Plan, as previously summarized in Section 2.3 of this chapter.

2.10. TIMING AND PHASING

There is no set time schedule for the implementation of individual projects within the planning areas, nor is there an established sequence for the phasing of new development within the planning area. The timing and phasing of projects pursuant to the Specific Plan would depend primarily on market demand, financial feasibility and the availability of construction financing. For the purpose of this analysis, it is, however, assumed that the projects that are anticipated in the Midtown area with adoption of the Specific Plan would be constructed and occupied prior to 2020.

2.11. INTENDED USE OF THE EIR

The following are the City of Milpitas approvals required for implementation of the Specific Plan to proceed. This EIR is intended to serve as the environmental documentation for these City actions.

1. General Plan Amendment to add the new land use designations described within the Midtown Milpitas Specific Plan (Mixed Use, Multifamily Very High Density, and the proposed overlay zones).
2. Zoning Ordinance modifications necessary to adopt the proposed Specific Plan.
3. Formation of a new redevelopment project area or expansion of Redevelopment Project Area #1 to include a larger portion of the Midtown area.
4. Adoption of the Milpitas Midtown Specific Plan via City Resolution.

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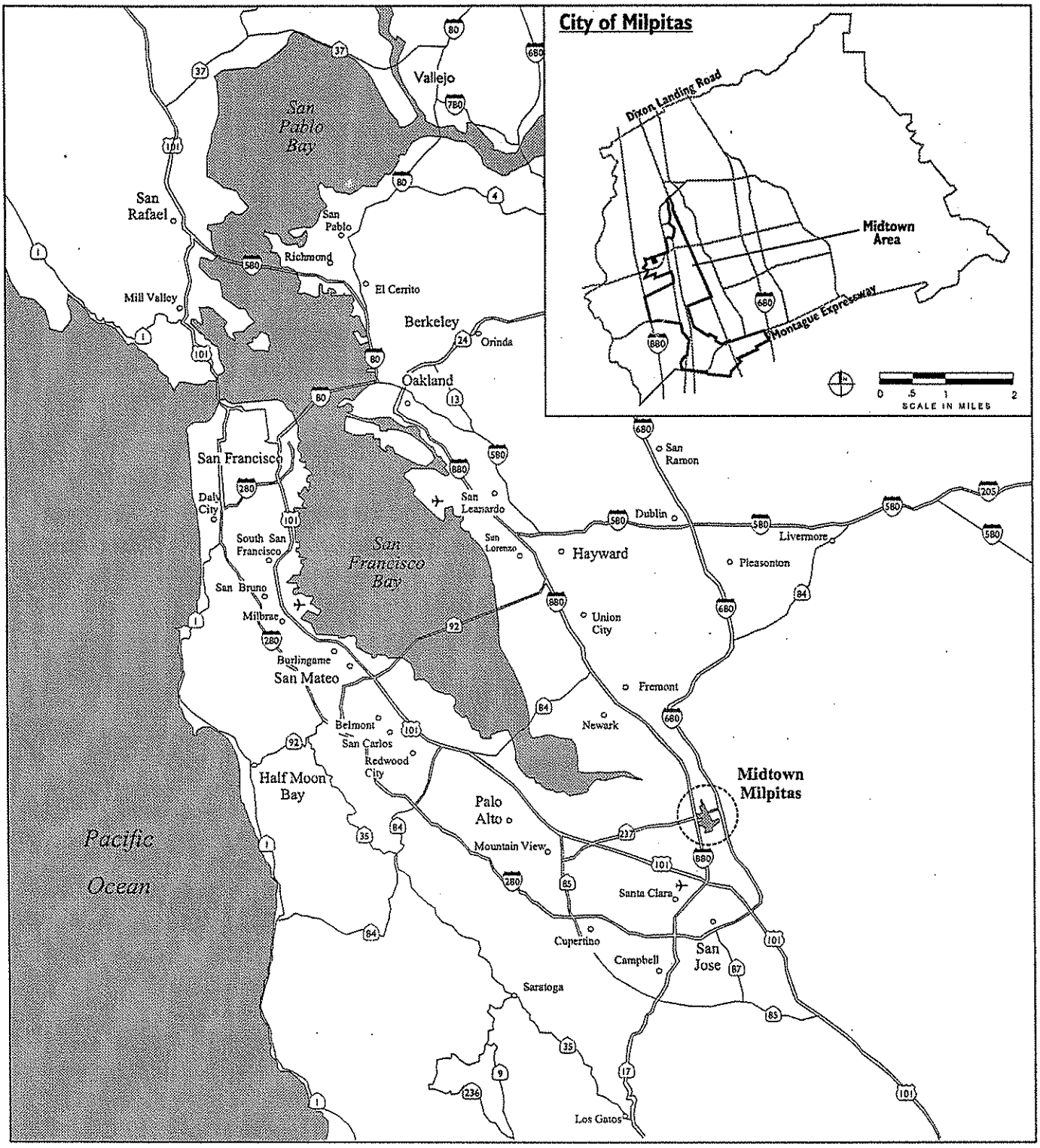
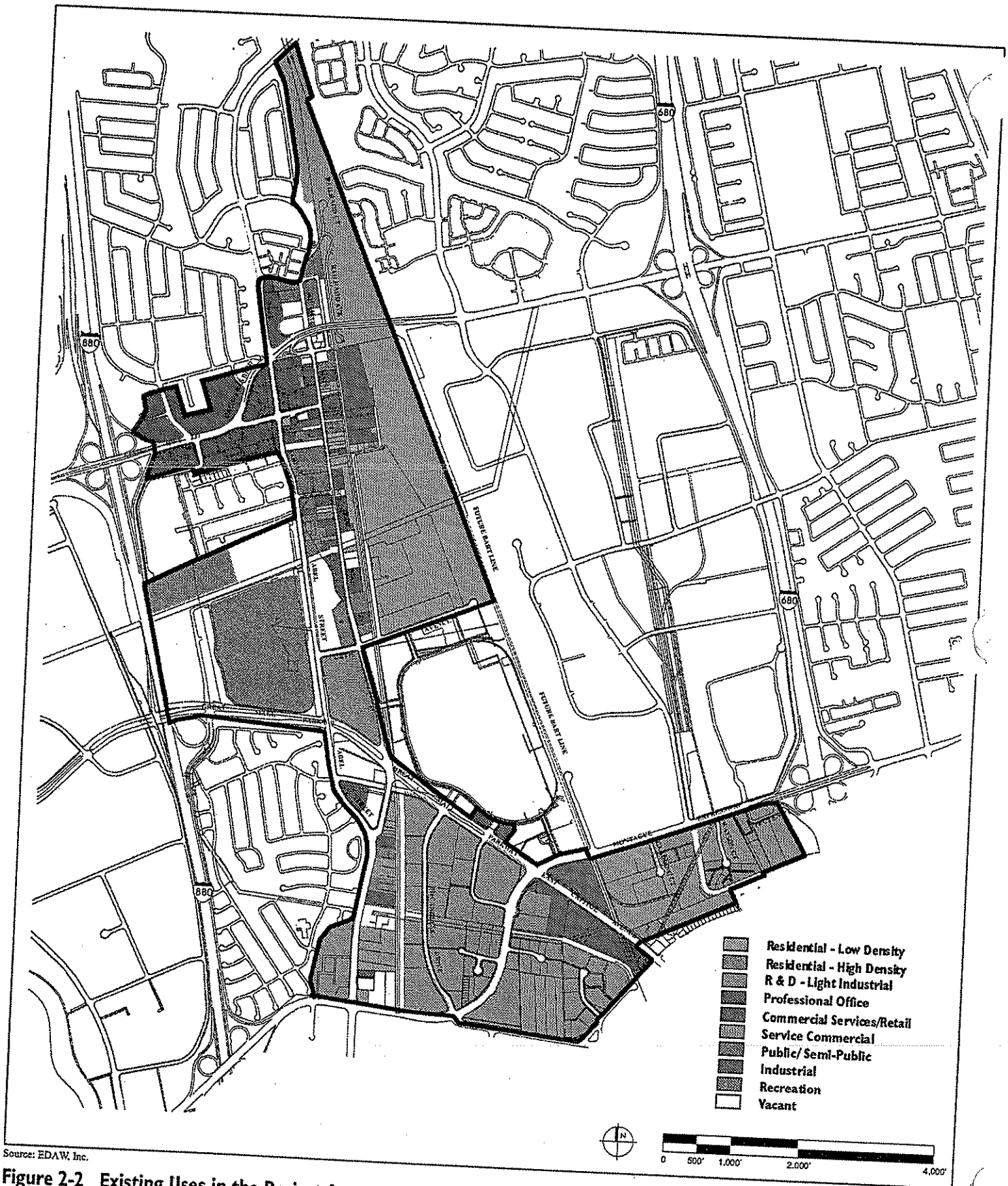


Source: Thomas Brothers Maps 1997.

Figure 2-1 Project Location

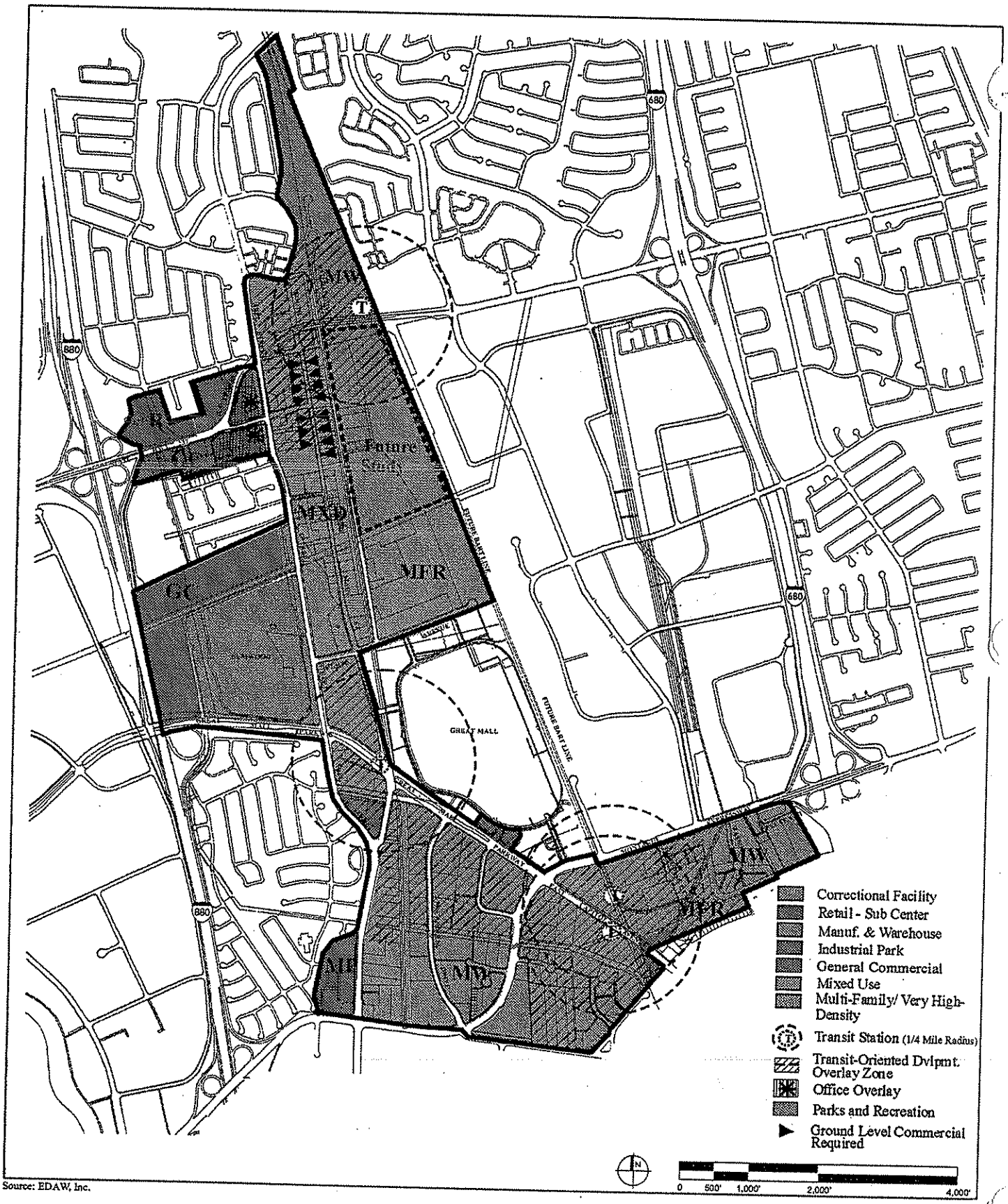


Source: EDAW, Inc.

Figure 2-2 Existing Uses in the Project Area

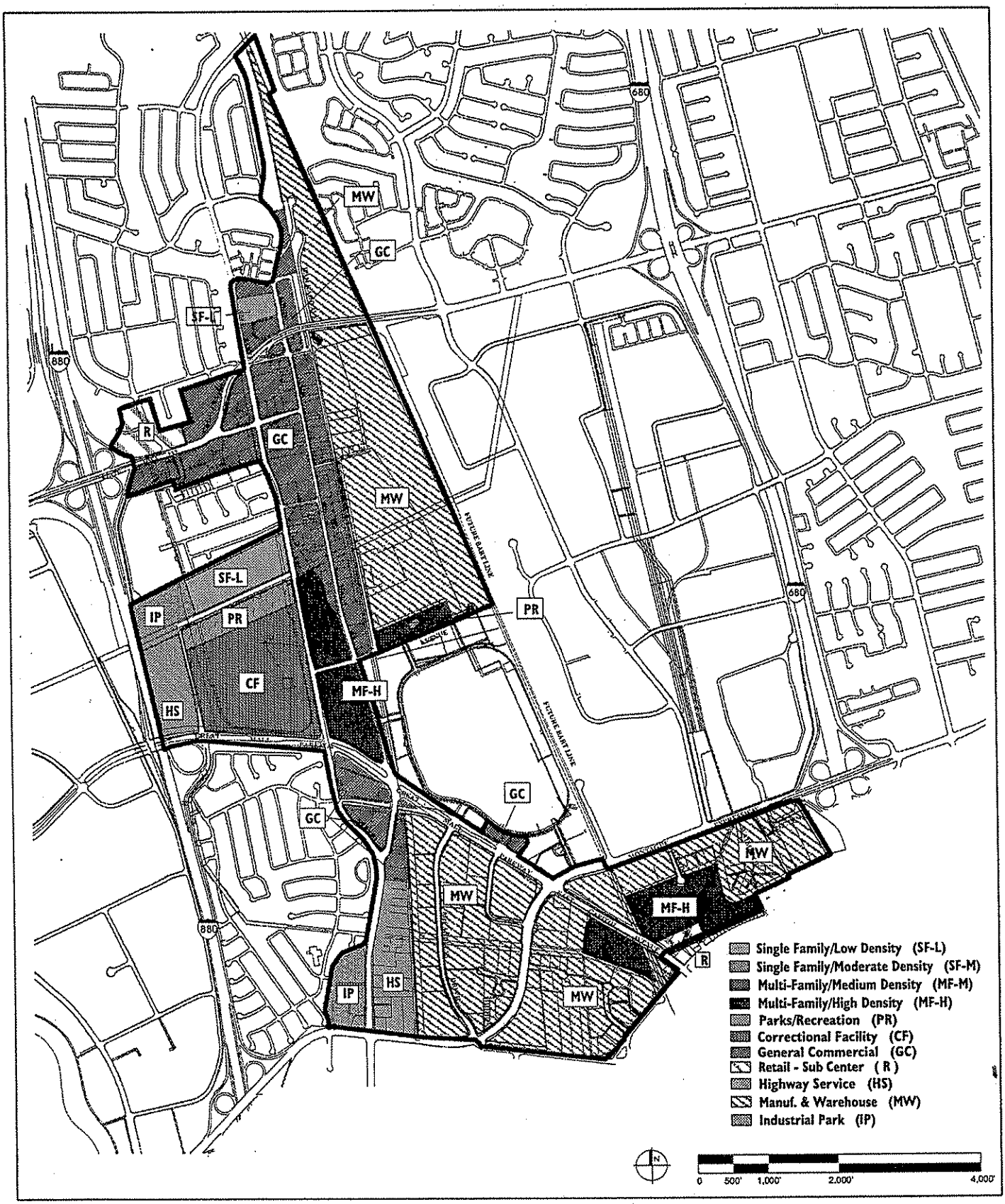
Source: EDAW, Inc.

Figure 2-3 Redevelopment Areas



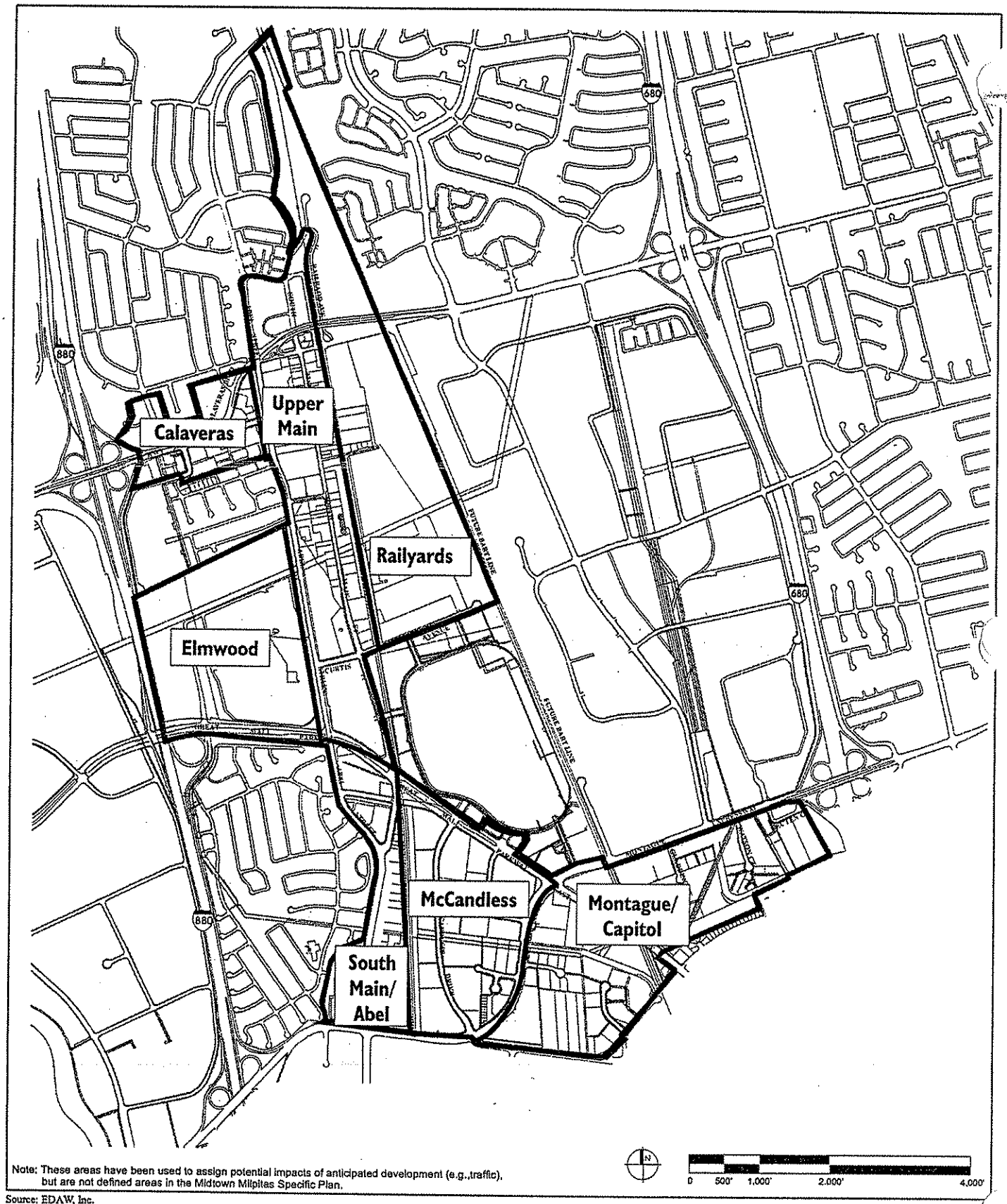
Source: EDAW, Inc.

Figure 2-4 Proposed Land Use



Source: EDAW, Inc.

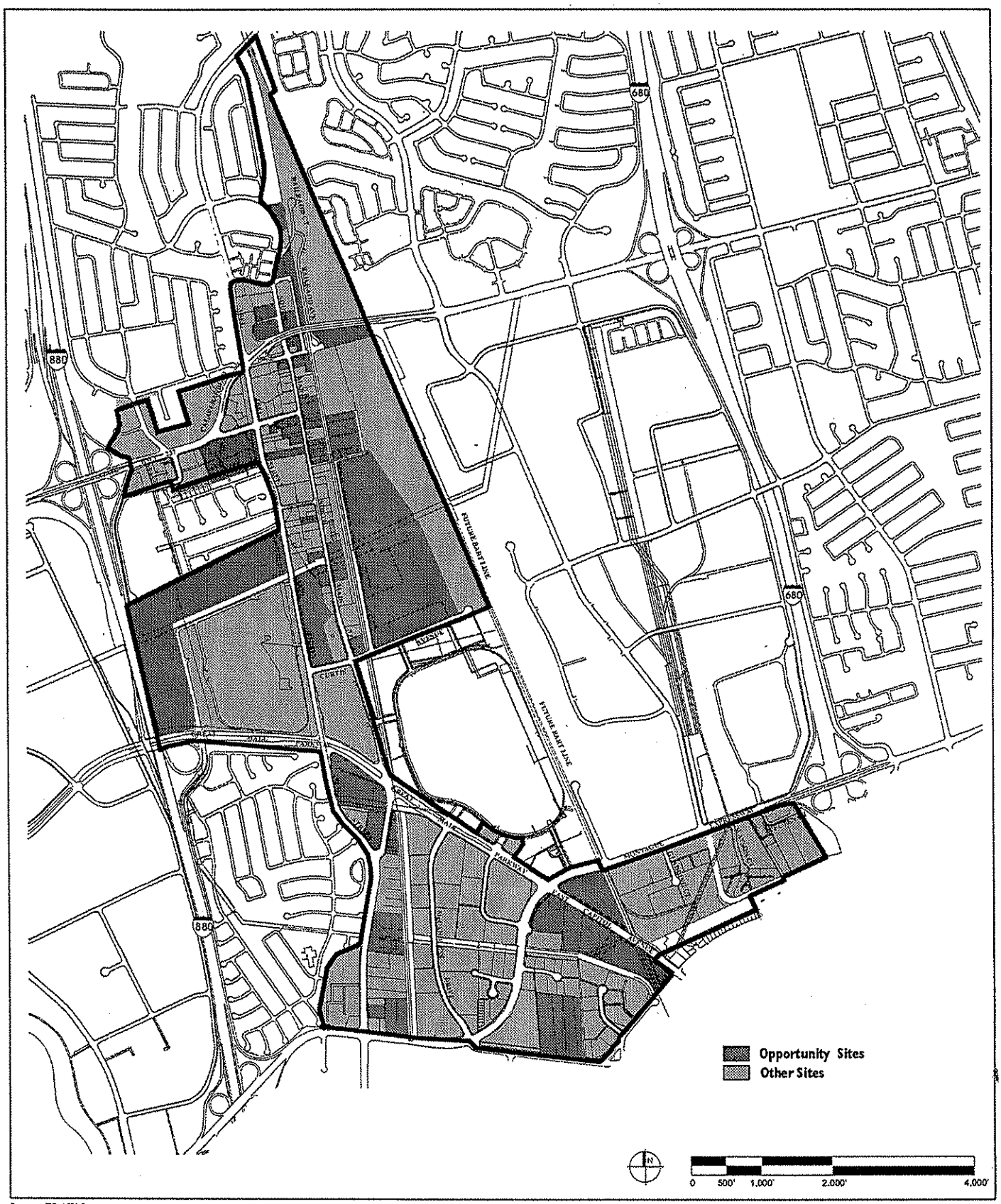
Figure 2-5 Existing General Plan Land Use Categories



Note: These areas have been used to assign potential impacts of anticipated development (e.g.,traffic), but are not defined areas in the Midtown Milpitas Specific Plan.

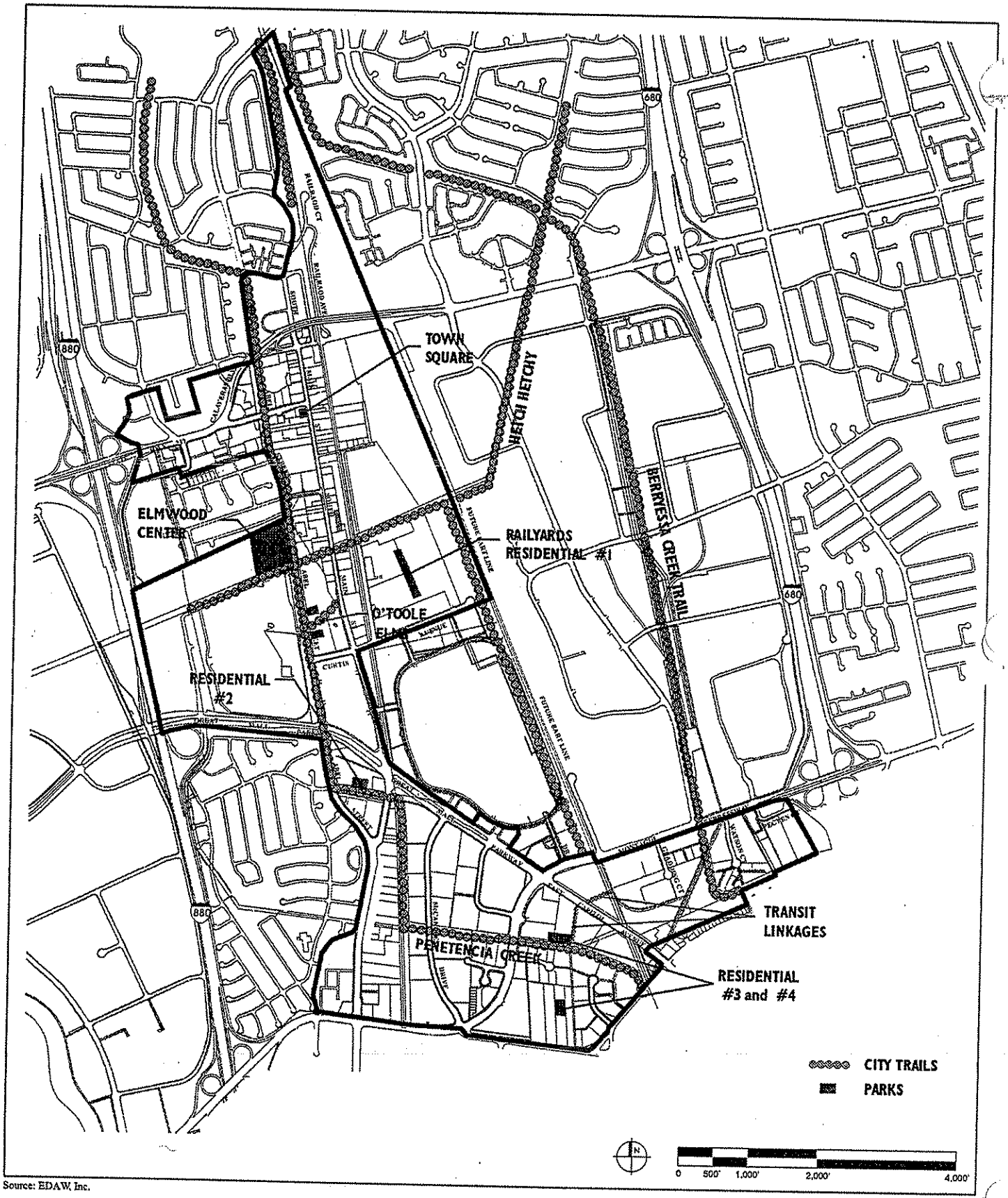
Source: EDAW, Inc.

Figure 2-6 Planning Areas



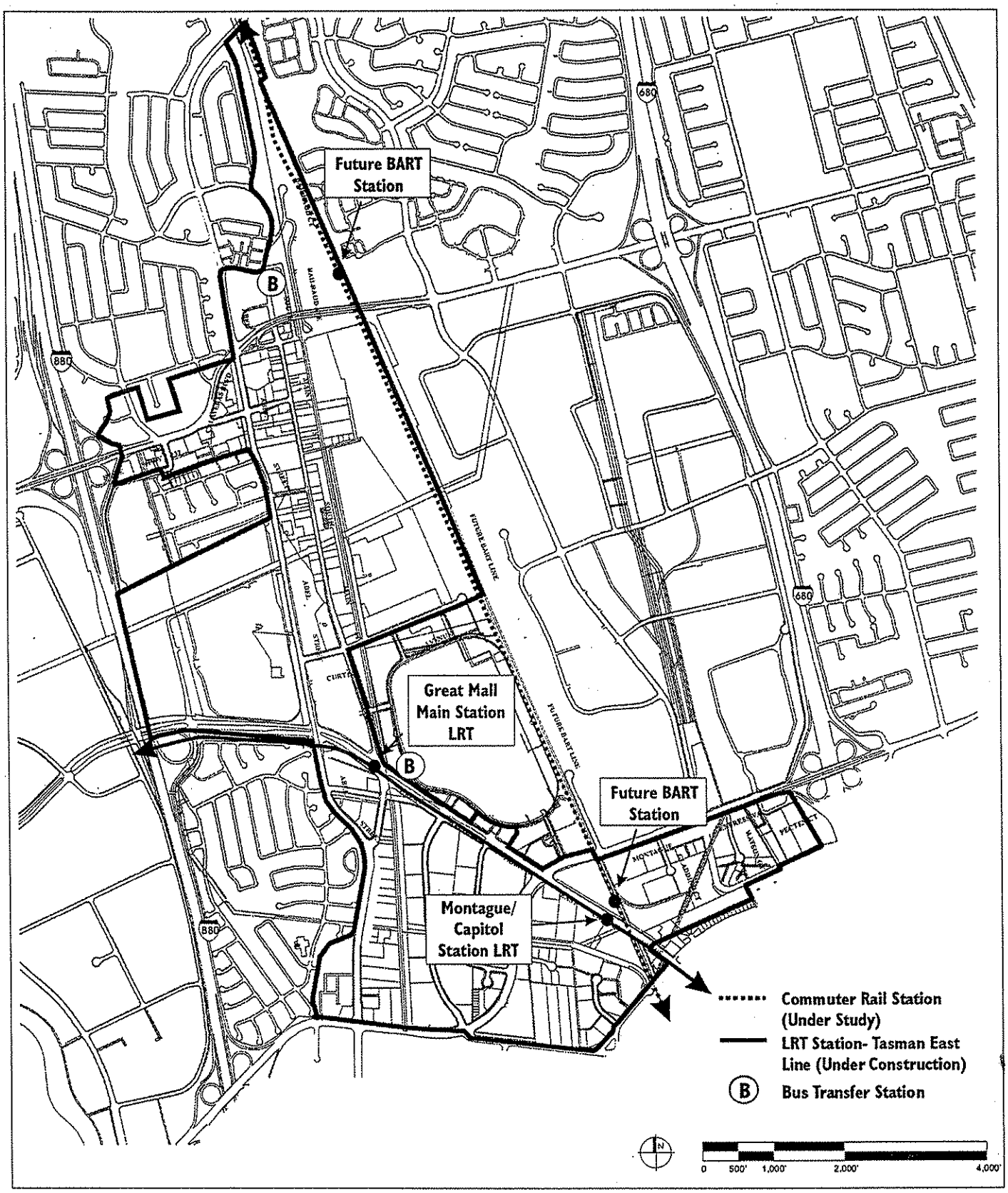
Source: EDAW, Inc.

Figure 2-7 Opportunity Sites



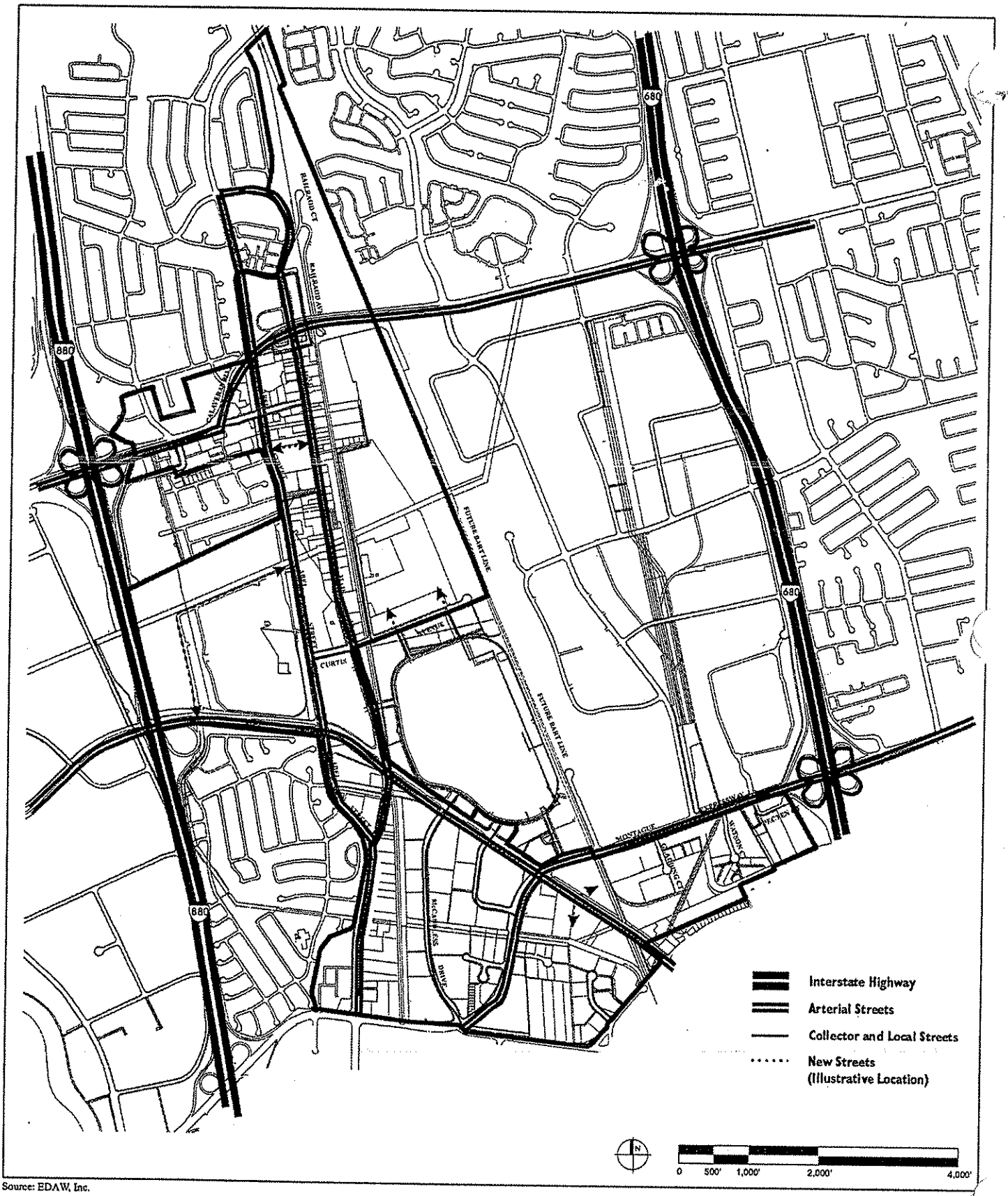
Source: EDAW, Inc.

Figure 2-8 Parks and Open Space Plan



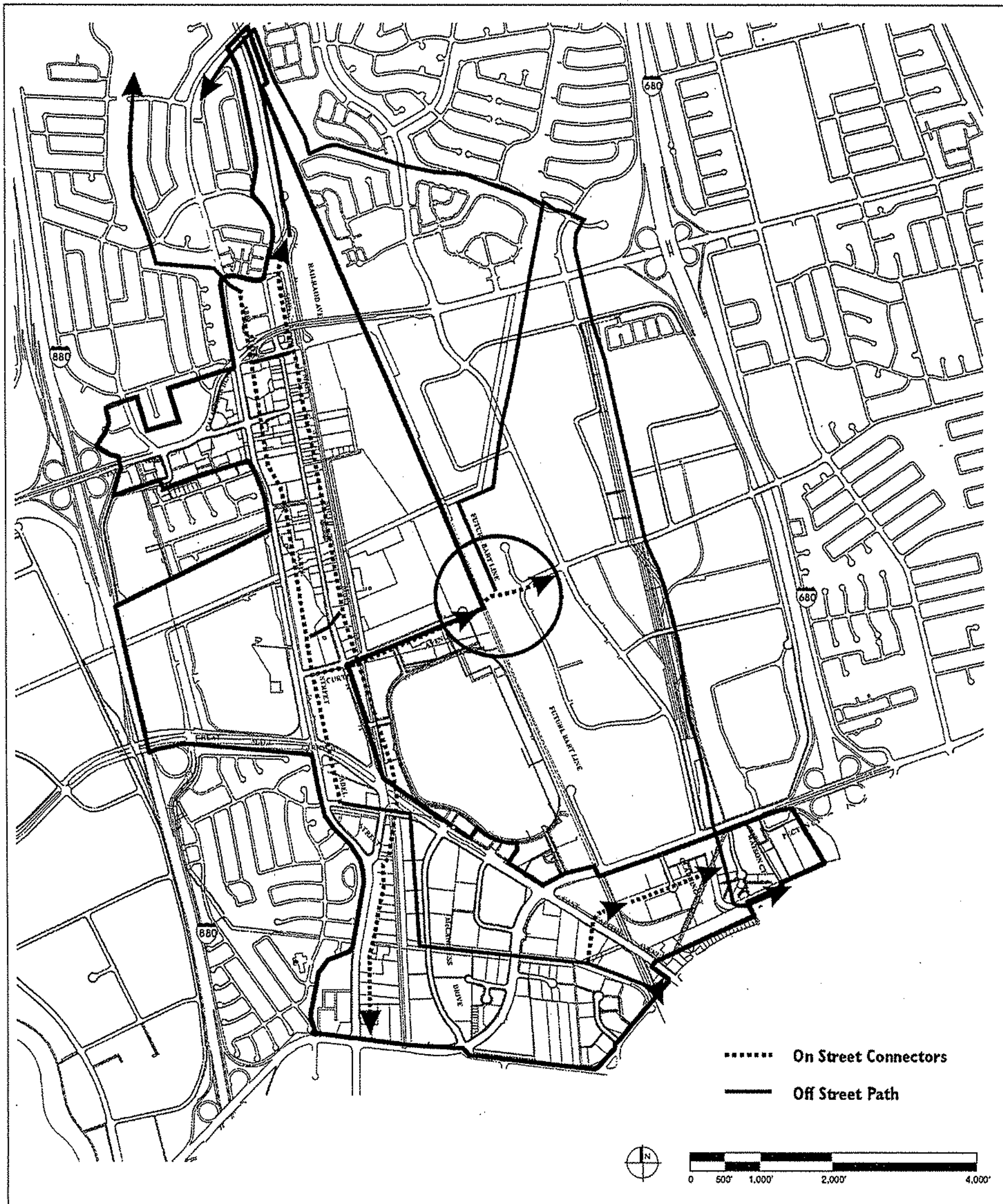
Source: EDAW, Inc.

Figure 2-9 Transit Plan



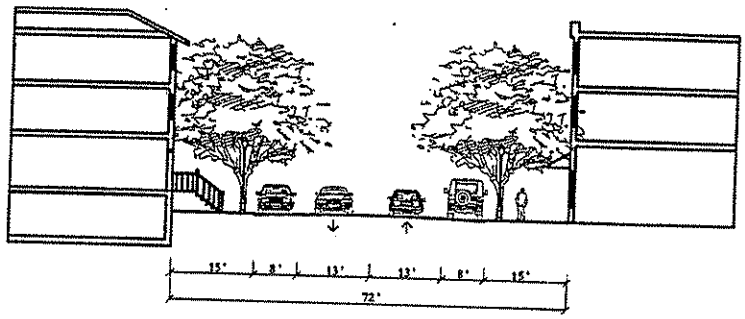
Source: EDAW, Inc.

Figure 2-10 Street System Plan

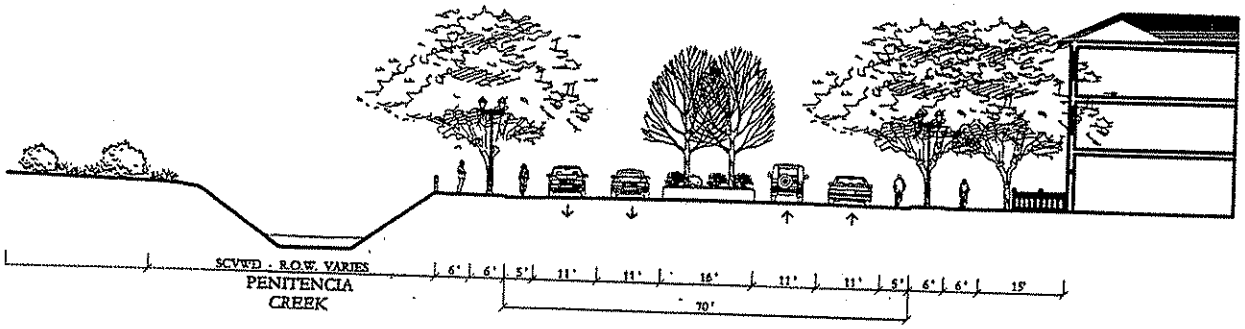


Source: EDAW, Inc.

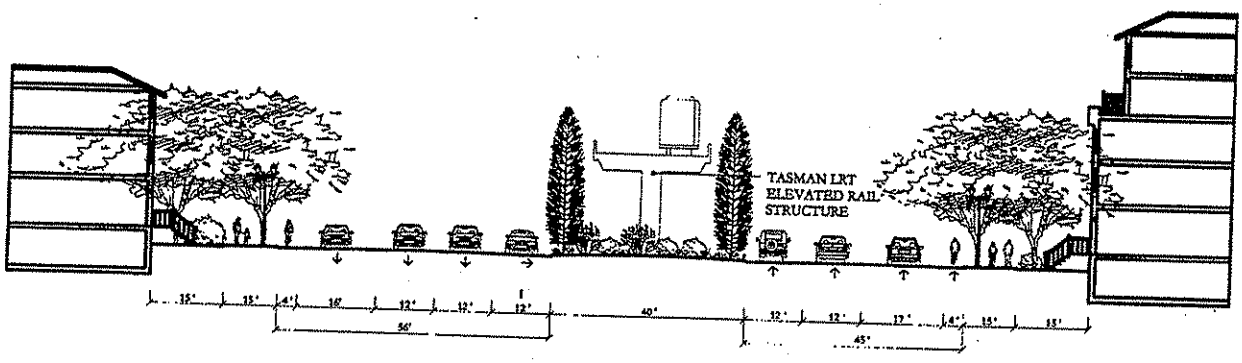
Figure 2-11 Bicycle and Pedestrian Trail Plan



Illustrative Street Section: Main Street



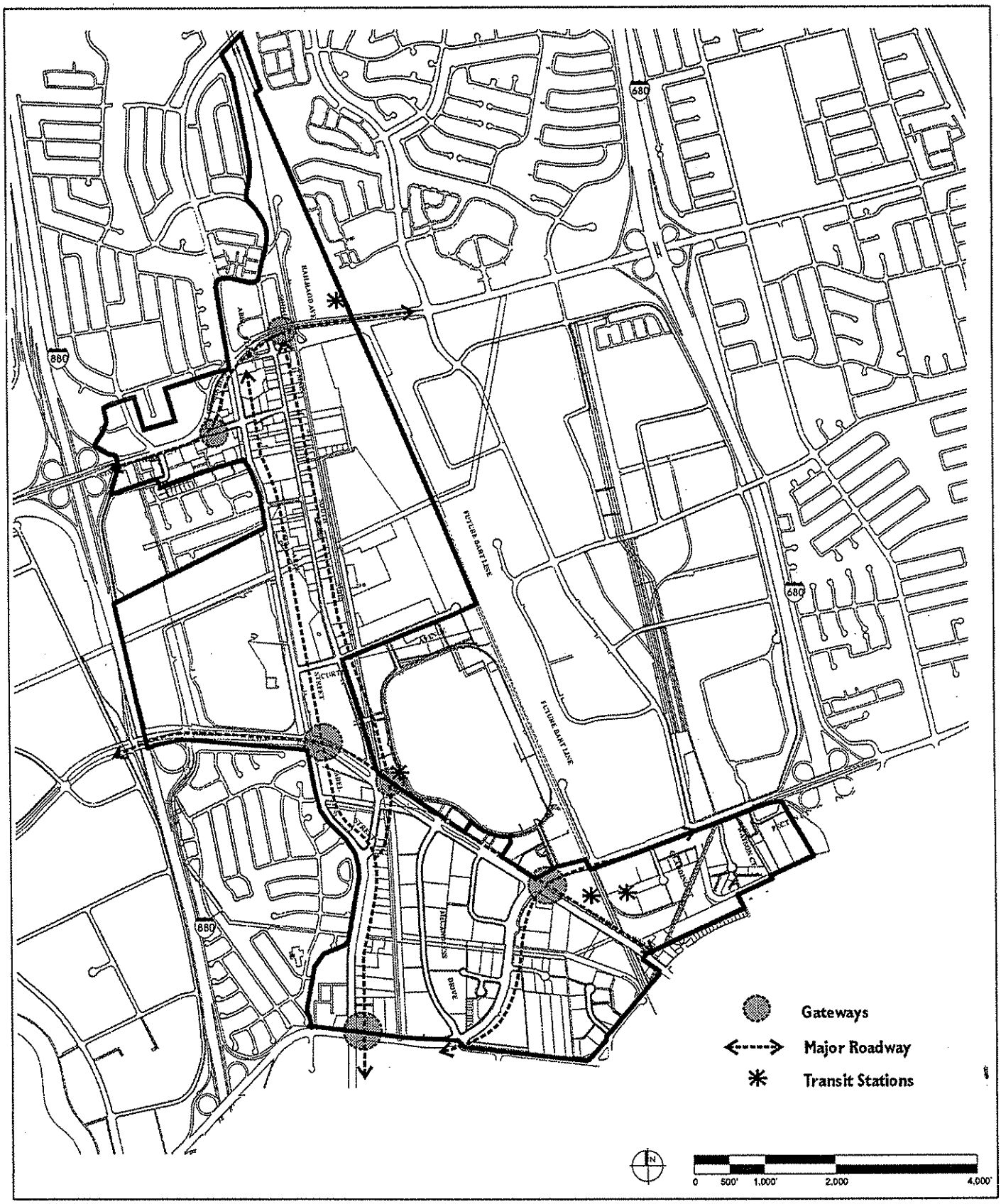
Illustrative Street Section: Abel Street (Typical where right-of-way exists)



Illustrative Street Section: Great Mall Parkway

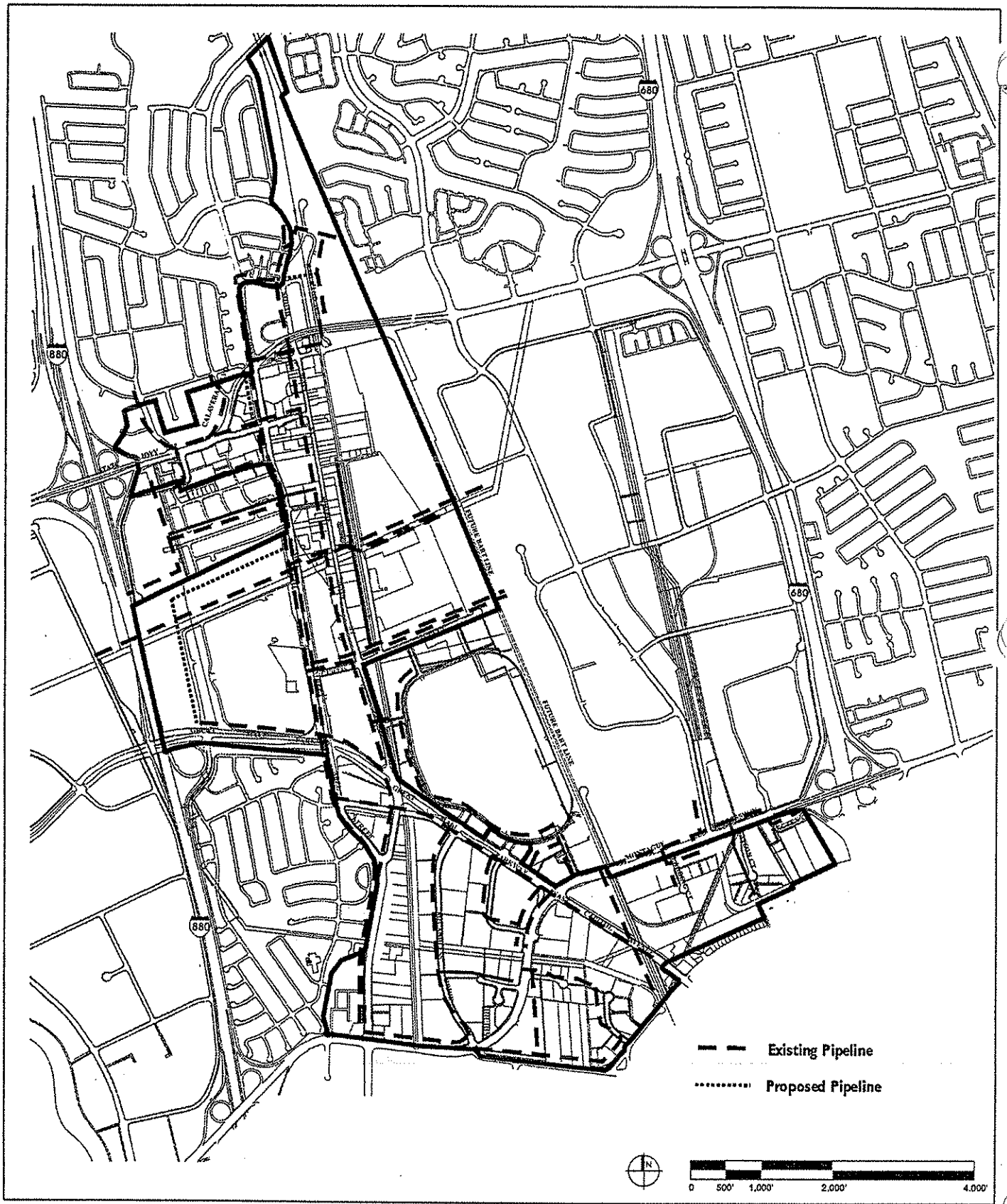
Source: EDAW, Inc.

Figure 2-12 Illustrative Street Sections



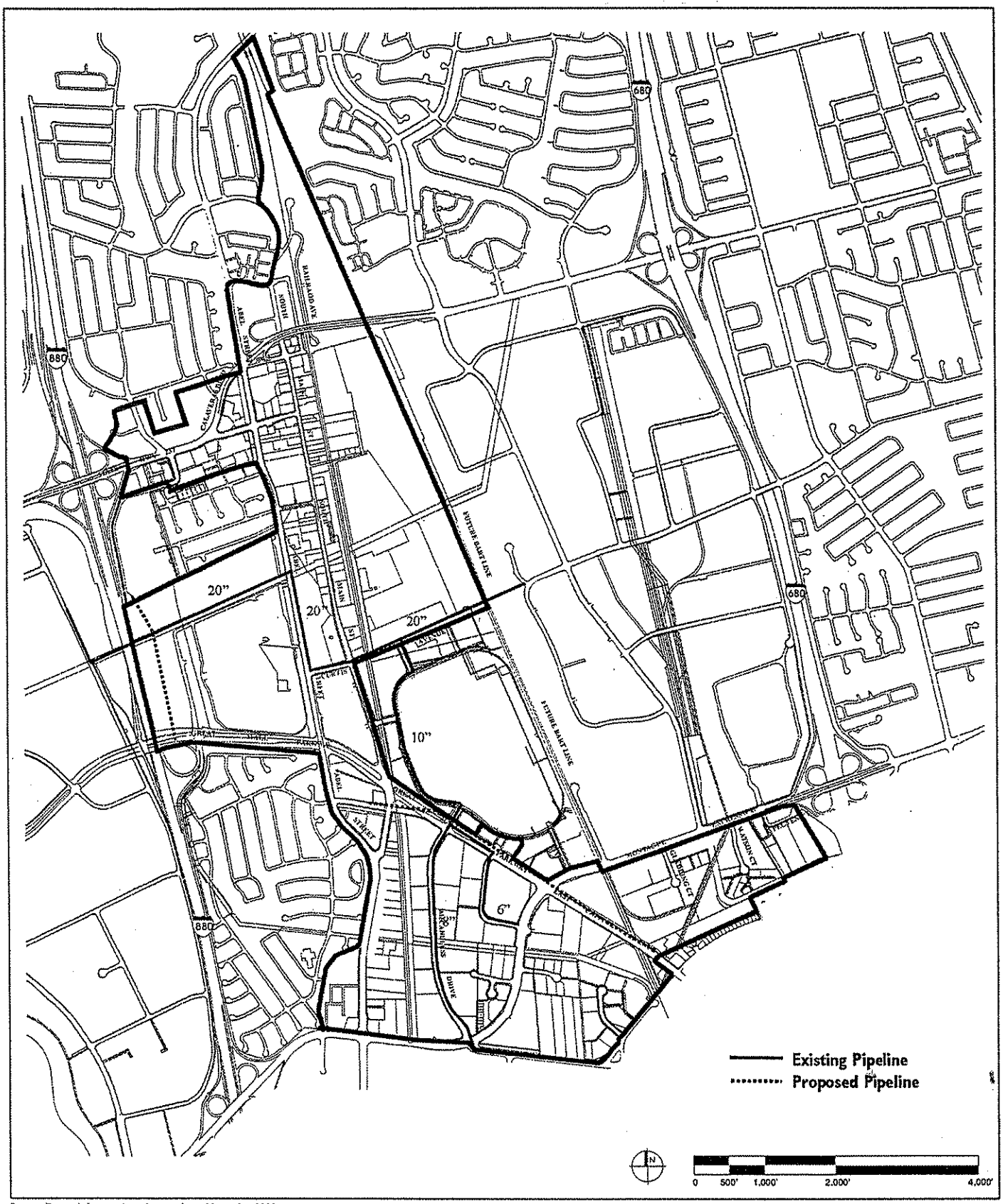
Source: EDAW, Inc.

Figure 2-13 Community Gateways



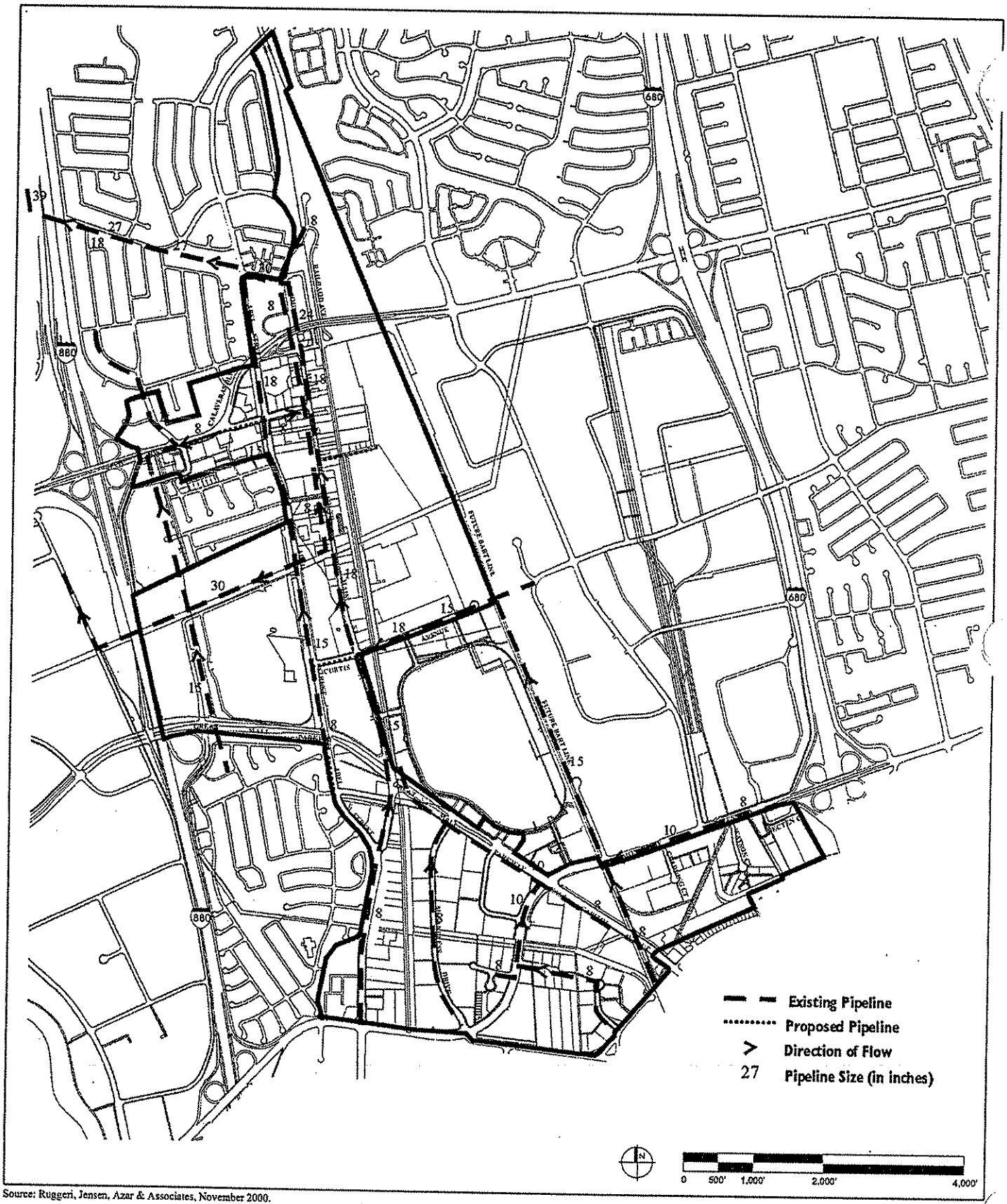
Source: Ruggeri, Jensen, Azar & Associates, November 2000.

Figure 2-14 Water System Plan



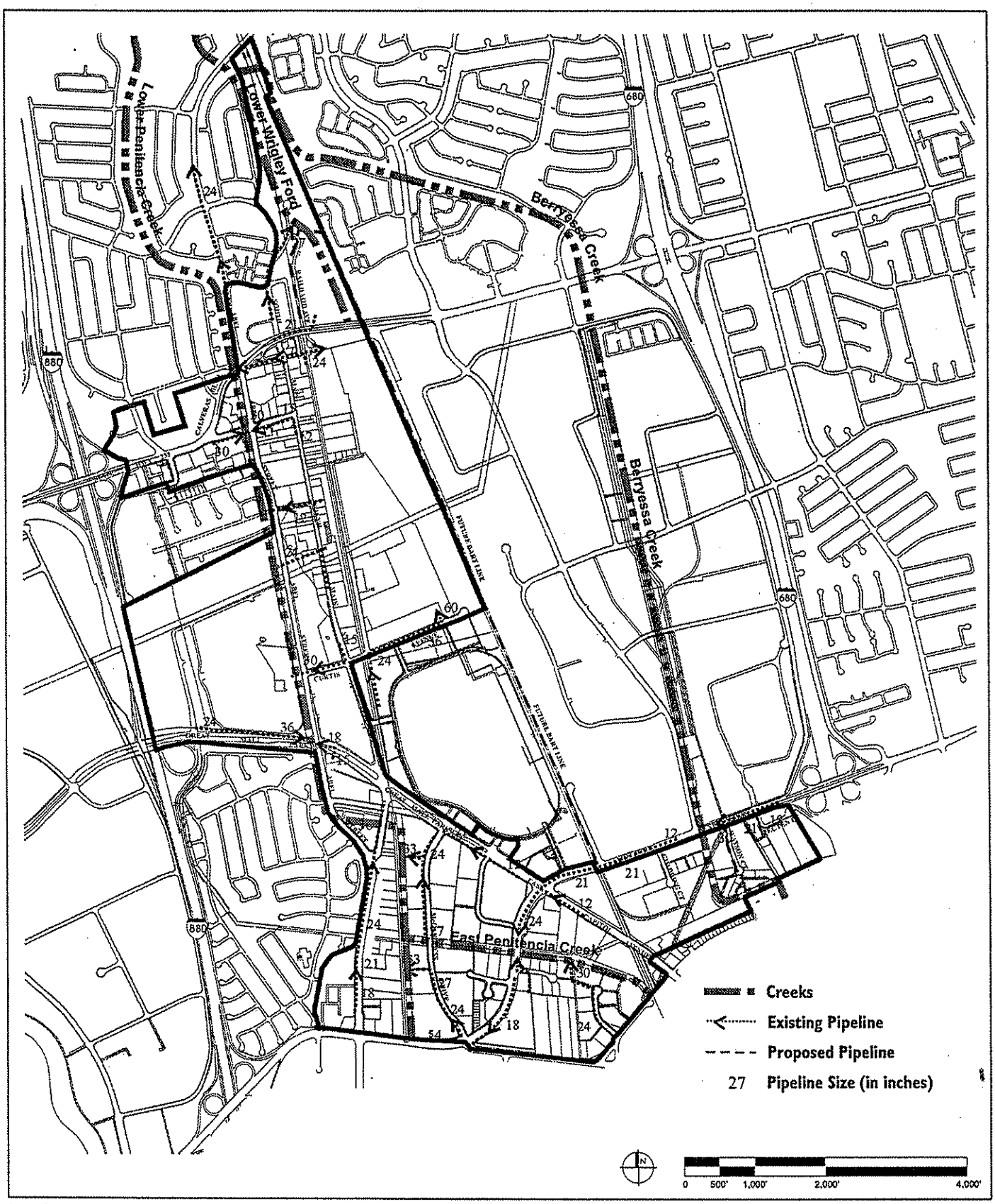
Source: Ruggeri, Jensen, Azar & Associates, November 2000.

Figure 2-15 Recycled Water System Plan



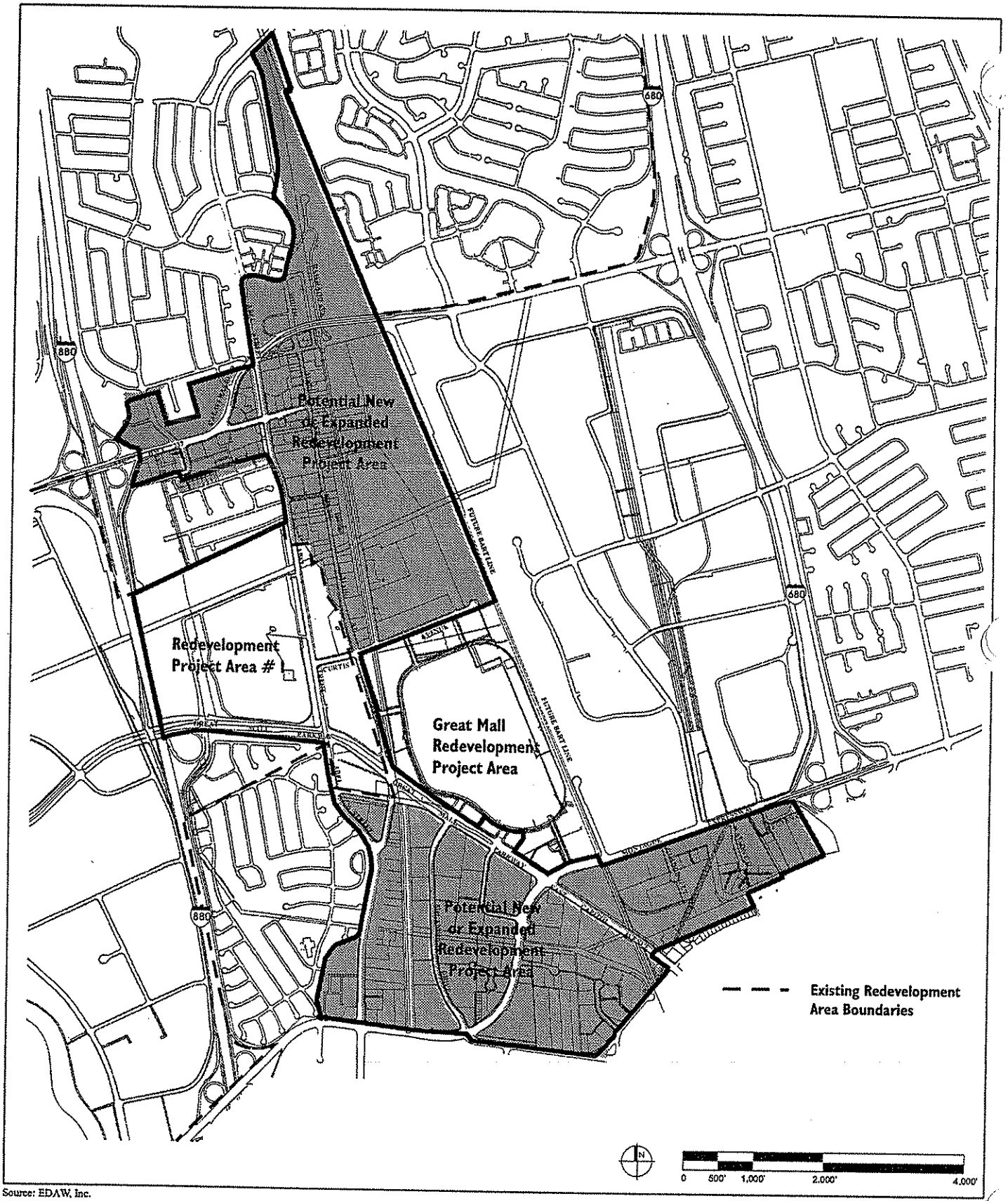
Source: Ruggeri, Jensen, Azar & Associates, November 2000.

Figure 2-16 Sanitary Sewer System Plan



Source: Ruggeri, Jensen, Azar & Associates, November 2000.

Figure 2-17 Storm Drainage System Plan



Source: EDAW, Inc.

Figure 2-18 Potential Redevelopment Expansion Areas

CHAPTER 3. ENVIRONMENTAL EVALUATION

This chapter consists of 11 sub-chapters that evaluate the environmental impacts associated with the implementation of the proposed Midtown Milpitas Specific Plan. Each chapter follows the same format, and consists of the following subsections:

- The **Existing Setting** section describes current conditions with regard to the environmental factor reviewed.
- The **Thresholds of Significance** provide guidance on how an impact is judged to be significant in this EIR. These thresholds are based on the CEQA Guidelines (Appendix G, Environmental Checklist Form) and applicable city regulations, where relevant.
- The **Environmental Evaluation** provides an assessment of the potential impacts of the proposed project, and tells why impacts were found to be significant or less-than-significant, or why there is no environmental impact. Significant environmental impacts are indicated by a left-justified box, and are followed by recommended mitigation measures. Where no feasible mitigation is available to mitigate impacts to a less-than-significant level, the impacts are identified as significant and unavoidable. This section also includes technical analyses of cumulative impacts, where appropriate. A summary of potential cumulative impacts is provided in Chapter 4 of this EIR.

Figures referenced in all of the following chapters are provided at the end of the chapters.

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CHAPTER 3.I. AESTHETICS

This chapter describes the existing planning area visual environment, the regulations that relate to visual resources and aesthetics, and the potential aesthetic effects from implementing the Specific Plan. This information is based upon field observations and a review of adopted plans and regulations affecting visual resources in the planning area. Information and analyses related to historic resources are provided in Chapter 3.8: Cultural Resources. Although these resources contribute to the visual landscape, detailed information on these resources is not provided herein in order to avoid duplication.

3.I.I. EXISTING SETTING

REGULATORY BACKGROUND

Plans and policies that regulate visual resources in the planning area include the City of Milpitas General Plan (1994 update) and the Tree and Planting Ordinance of the City of Milpitas (Ord. 201.2 (part), 3/1/94: Ord. 201.1 (part) 3.8/88).

Milpitas General Plan

The Open Space and Conservation Element of the City of Milpitas General Plan identifies visual resources and scenic routes in the city and provides guiding principles and implementing policies for their preservation and enhancement. Visually significant resources include hilltops or ridges, hillsides, vegetation, and major visual gateways. Scenic routes are classified as either scenic corridors or scenic connectors.

Scenic Resources

The General Plan notes that the hills to the east and the tree-lined Coyote Creek corridor provide Milpitas with a scenic backdrop and visual reference points. Major visual gateways are located along Calaveras Road east and west of the planning area, and along I-680 and I-880 north and south of the planning area. None of the identified scenic resources are within the boundaries of the Specific Plan planning area. The hills can be seen in the distant background from points along Main Street where gaps in the streetwall occur. They also are visible from those roads that travel in an east-west direction (including Calaveras Boulevard).

Major Visual Gateways

Major visual gateways are located at the entry points into the City from I-880, I-680 and SR 237 (Calaveras Boulevard). A major visual gateway also is identified along Milpitas Boulevard at its entrance into the city.

Scenic Routes

The General Plan establishes a network of scenic routes to maintain and improve the character and views of scenic resources from streets, maximize access to parks, open space and other resources. These are streets or corridors that pass through an area of scenic value, provide efficient connections between such areas, or provide distant views of scenic resources. Two types of scenic routes are established as described below.

- **Scenic Corridors.** Scenic corridors are located along designated streets that pass through an area of scenic value. Areas within the corridors are subject to special development controls for the purpose of retaining and enhancing nearby views or maintaining unobstructed distant views. Public projects are also subject to review for compliance with the controls. No designated scenic corridors are located in the planning area.
- **Scenic Connectors.** Scenic connectors are streets connecting or providing access to scenic corridors or distant views. A scenic connector does not necessarily traverse an area of scenic value, and the abutting land is not subject to the scenic corridor land use controls. Special design treatments, such as roadside landscaping, undergrounding of utility lines, and street furnishings, are to be carried out by the City to provide a visual continuity with the scenic corridors. Calaveras Boulevard, which traverses the planning area, is identified as a scenic connector, as are I-680 and I-880, east and west of the planning area.

Guiding Principles and Policies

The following are the Guiding Principles and Policies provided in the Open Space and Conservation Element of the General Plan that are directly related to scenic resources and aesthetics.

4.g-G-1 Preserve and enhance the natural beauty of the Milpitas area.

4.g-G-2 Establish a network of continuous and varied Scenic Routes that provide views of Scenic Resources and access from urban areas and the regular transportation network to parks, open spaces and cultural attractions.

4.g-G-3 Enhance the visual impact of the gateways to Milpitas.

4.g-I-2 Permit clustering of structures to preserve open space while providing for desired development.

4.g-I-7 Ensure that all landscaping within and adjoining a Scenic Corridor or Scenic Connector:

- Enhances the City's scenic resources by utilizing an appropriate scale of planting, framing views where appropriate, and not forming a visual barrier to views.
- Relates to the natural environment of the Scenic Route; and
- Provides erosion control.

4.g-I-9 Prepare and implement landscape plans for treatment of major gateways into the City.

4.g-I-11 Undertake an evaluation of and implement any steps necessary to ensure that the design and location of signs within and adjoining Scenic Routes does not lead to unsightly and obtrusive conglomerations of advertising.

4.g-I-12 Undertake a program to place appropriate and consistent Scenic Route identification signs periodically along all Scenic Routes.

Tree and Planting Ordinance (Ord. 201.2 (part), 3/1/94: Ord. 201.1 (part) 3/1/88)

The Tree and Planting Ordinance recognizes the aesthetic importance of trees and plantings in the community, and establishes as City policy the preservation, when feasible, of all trees and plantings on City property, and all protected plantings of substantial size, age, and or benefit to the community at-large. The Community Services Manager is responsible for administering and enforcing the provisions of the ordinance, and the Director of Parks and Facilities is responsible for preparing a list of approved street trees to be authorized for planting in streets or easements adjacent to streets. The ordinance requires a permit to plant any tree in the public right-of-way. Existing trees with a circumference ranging from 37-inches to 56-inches cannot be removed without obtaining a permit under certain conditions. Heritage trees and specimen plantings also require a permit for removal. Any fees assessed for permits or infractions are to be deposited into a Tree Replacement Fund for reforestation of the City's tree population.

EXISTING VISUAL ENVIRONMENT

The planning area is highly urbanized with a variety of building types, roadway design, and pedestrian improvements. The buildings exhibit several architectural styles, and the scale and size of development ranges from small buildings fronting two lane streets focused on pedestrian use, to large retail commercial areas along thoroughfares oriented to automotive use. Pedestrian improvements vary from wide to non-existent sidewalks, frequent curb cuts for driveways, and an irregular assortment of street trees. Several signs and overhead utility poles are located in sidewalks throughout the area.

Building Style

Buildings in the planning area are a combination of relatively new (i.e., constructed from the 1970s to the present) and old single and multi-storied structures representing several architectural styles, with few noticeable patterns. They exhibit a variety of materials, finishes, and roof shapes including parapets and pitched roofs, and are painted a variety of colors. Metal or concrete block walls and flat metal roofs characterize several commercial service buildings in the planning area. Some free-standing older homes also are scattered throughout the area, particularly along Main Street. The Monte Vista and Parc Metropolitan multi-family developments, completed within the last few years, represent a more cohesive architectural and site design.

Building Scale

The buildings, parcels, and roadways throughout the planning area are varied in scale and size. The Main Street area buildings are on smaller lots adjacent to a two-lane street; while buildings in the Calaveras retail area and McCandless and Montague development area are larger and oriented to automobile access.

Streetscape

Main Street, Abel Street, Calaveras Boulevard, and Great Mall Parkway/Montague Expressway carry the majority of traffic through the planning area. Calaveras Boulevard and Great Mall Parkway/Montague Expressway are east/west thoroughfares linking Interstates 880 and 680 through Midtown.

Main Street was originally the main highway along the East Bay. The two-lane road accommodates north and southbound class II (striped on-street) bike lanes, resulting in the location of on-street parking along one side to accommodate the bike lanes. Because of the road's relatively narrow cross section, most of the on-street parking that was once available has been eliminated to accommodate the bike lanes. The street is lined with sidewalks, interrupted by numerous curb cuts, signs, power poles for overhead utilities, and irregular street tree planting patterns. Although this street is of an appropriate scale for a pedestrian-oriented street, this collection of elements creates a strip-commercial character rather than a traditional downtown image for the area.

Abel Street is a major four-lane, north-south corridor bordered on the west by Penitencia Creek. It once functioned primarily as a local road, but has evolved into an alternative for northbound commuters who wish to bypass congestion on Highway 880 during PM peak periods. Abel Street is wider than Main Street, intersects Calaveras Boulevard and Great Mall Parkway and is more well suited to accommodate heavier volumes of through traffic. The streetscape is irregular and lacks planting. Penitencia Creek is located on the west side of the street.

Calaveras Boulevard follows a circuitous path from Highway 880 through the planning area shopping district. Irregular landscape treatments and broad parking lots line the four-lane median divided roadway. The streetscape of this auto-oriented district is cluttered by signs, numerous curb cuts, unusual building placement and skewed intersection alignments.

Great Mall Parkway and Montague Expressway are broad east/west streets leading through the planning area, providing east-west access between the two Highways. A new addition to this roadway will be the elevated light rail tracks of the Tasman East light rail transit line. Streetscape conditions along this roadway include a wide unimproved median (which will be improved with the extension of light rail into Midtown), sound walls, irregularly placed street trees and broad intersections.

Open Space and Views

There are currently no developed open space areas in the planning area. An undeveloped mini-park is located at Carlo and Main Street. Three public parks would be constructed with the Parc Metropolitan housing development. The Milpitas Trails Master Plan proposes several off- and on-street trails for the planning area. Several open views to the mountains east of Milpitas provide a visual backdrop to the planning area and a strong sense of orientation while traveling in the urbanized area.

Landmarks and Focal Points

The planning area contains several landmarks and focal points that contribute to the identify of the area. Several structures along Main Street, including the Milpitas Senior Center, Campbell's Corner, An-Jans, the DeVries House, the Windsor Blacksmith Shop, and Craftsman and Victorian era homes provide a

historic context to the built environment. More information on these resources is provided in Chapter 3.8, including a location map of the resources. The O'Toole Elms, a remnant landscape feature linking Main and Abel Streets, provides a strong visual element in the planning area. The location of the elms is shown on Figure 3.8-1, which is provided in the Chapter 3.8: Cultural Resources.

SPECIFIC PLAN ELEMENTS

One of the primary objectives of the Specific Plan is to improve the appearance and visual character of the planning area. Through the Specific Plan Development Standards and Guidelines, the Specific Plan establishes standards for the aesthetic quality of new development. Implementation of Specific Plan would require adherence the development standards.

Building Development Standards and Guidelines

The Development Standards identify height, density and setback requirements. These standards are mandatory and will conform to the zoning regulations for this area. They would limit building height in the Mixed Use District to a maximum of three stories and not more than 45 feet (special architectural features, such as towers or corner elements, could be up to 55 feet). In the Multi-Family Residential Very High Density District, building heights would range from 60 feet, to 75 feet in the TOD Overlay Zone. The intent of the height limitations is to maintain the pedestrian oriented theme throughout the varied land uses in the planning area.

The Design Guidelines included in the Midtown Milpitas Specific Plan include recommendations for the siting and articulation of buildings, the size and design of entryways, plazas, roofs, equipment, parking lots, and loading facilities. The intent is to foster a pedestrian building scale while allowing variations in façade, roof styles and architectural details to reduce the likelihood of visual monotony. Recommended measures to achieve the pedestrian scale and visual interest include articulating all residential building street facades with porches, bay windows, dormer windows, and/or balconies; designing ground floor commercial uses so they appear characteristically similar to traditional street front businesses with large storefront windows, and easily accessible, clearly defined entries; and designing multi-family buildings to appear as several smaller buildings rather than a single unvaried mass. It is further recommended that building materials be of a high quality and convey substance over any particular architectural "theme".

Streetscape Improvements

The Specific Plan also proposes streetscape improvements that could affect visual conditions within the planning area. The streetscape improvement recommendations are intended to contribute to the pedestrian accessibility and the visual quality of the City streets within the planning area. Landscaping along east-west streets would also enhance views of the mountains east of the planning area. Specific improvements that are recommended in the Specific Plan are as follows:

- Abel Street is proposed to be developed as a "green" boulevard with a landscaped median and accommodations for pedestrians and bicyclists. These improvements are intended to reduce the perceived width of the street. Bicycle lanes would be provided within the street and ultimately a Class 1 bicycle and pedestrian trail along the west-side in association with Penitencia Creek would be developed. Continuous street tree plantings would occur at the curb.

- Main Street is proposed as a two-way street with parallel parking on both sides. General streetscape improvements, including street tree landscaping, benches and lighting are proposed to improve the overall appearance and amenity of the street.

- Great Mall Parkway is recommended to be improved with street tree landscaping along the sidewalk curb edge and within the transit median. This street currently includes bike lanes from I-880 to Great Mall Drive where the street narrows and the street becomes a bike route. Improvement plans for Great Mall Parkway call for the extension of the bike lane further south to Capitol Avenue in San Jose.

- The smaller streets that connect Main and Abel streets (Curtis, Corning, Serra, and Carlo) are recommended to be improved with street trees planted in planter strips at the curb.

Open Space and Parks

The Specific Plan recommends providing public parklands and creek trail improvements, consistent with the Milpitas Trails Master Plan, to reinforce the pedestrian network. A transit green is also proposed for the future commuter rail station to include turf, trees, sitting areas, a small hardscape plaza, pedestrian scaled lighting and bordered by sidewalks. A civic open space is proposed on Main Street, preferably in the vicinity of Serra Way. The civic open space would include landscape features such as turf grass lawn, hard-surfaced area, raised landscape features (planters) designed for informal seating and a seating area shaded by grouping of flowering trees, moveable and permanent seating tables for public and café/restaurant. Office developments would also have an outdoor open space or plaza that are oriented to the sidewalk. Additionally, the Specific Plan proposes establishing a minimum 2-acre park in association with the O'Toole Elms and a ten-acre park in association with development of the Elmwood Surplus property.

Landmarks and Community Gateways

The Specific Plan identifies landmark and community gateways in the planning area. The Specific Plan recommends maintaining the architectural and landscape elements that contribute to its identity and sense of history while introducing new structures and activities that can provide a visually interesting mix of old and new. Rehabilitation and reuse of designated buildings or features are recommended by the Specific Plan (Policy 5.7). In addition, community gateways are recommended for special landscape and/or architectural features to enhance the entry image (Policy 5.6).

3.1.2. THRESHOLDS OF SIGNIFICANCE

The Environmental Checklist Form, provided as Appendix G to the CEQA Guidelines, is the basis for identifying the thresholds of significance. The Initial Study performed for the proposed Specific Plan (Appendix A) used the checklist to identify potentially significant impacts and those that would not be significant (and therefore not evaluated in the EIR).

Based on the Environmental Checklist Form and the conclusions of the Initial Study, the proposed Specific Plan could have a significant aesthetic impact if it would:

- Substantially degrade the existing visual character or quality of the site and its surroundings.

The Initial Study found that the Specific Plan would not adversely impact views to the foothills east of the planning area, identified as scenic resources in the General Plan. The Initial Study also found that the Specific Plan would not create a substantial new source of light and glare, and that it would not substantially damage scenic resources.

3.1.3. ENVIRONMENTAL EVALUATION

Implementing the Specific Plan would introduce a cohesive urban form designed to reinforce pedestrian accessibility to the planning area. The Specific Plan proposes development standards and design guidelines for the planning area that establish standards of use, form, scale and connectivity. Height limits are established for new development consistent with existing development standards. The Design Guidelines include recommendations for the siting and articulation of buildings, the size and design of entryways, plazas, roofs, equipment, parking lots, and loading facilities. The streetscape improvement recommendations are intended to contribute to the pedestrian accessibility and the visual quality of the City streets within the planning area. New development would be oriented towards and street and be tied together through a system of "green" streets and boulevard, trails and open spaces. New development would be punctuated by urban open spaces and linked into the larger pedestrian and bicycle system. The Specific Plan recommends providing public parklands to reinforce the pedestrian network. The Specific Plan recommends maintaining the architectural and landscape elements that contribute to its identity and sense of history while introducing new structures and activities that can provide a visually interesting mix of old and new. New development would be harmonious with older structures without falsely trying to reproduce historic features. Gateway areas would be given special attention in terms of both architecture and landscape standards. These changes to the physical appearance and scale of the planning area would improve the visual environment. No mitigation is required.

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CHAPTER 3.2. GEOLOGY, SOILS, AND SEISMICITY

This chapter summarizes the geologic environment of the Midtown planning area based on familiarity with current site conditions, published and unpublished geologic reports and maps, and earlier environmental review documents for projects in the area. This chapter also provides an assessment of impacts that could occur as a result of violent ground shaking, liquefaction, and settlement.

3.2.1. EXISTING SETTING

REGIONAL GEOLOGY

The Midtown planning area is located at the western coastal margin of the Coast Range Geomorphic Province of Northern California. Northwest-southeast trending ranges of low mountains and intervening valleys dominate this region. More specifically, Milpitas is located near the southeastern margin of San Francisco Bay. The bay occupies the upper part of a geological structural depression which has formed over the last 1,000,000 years. However, the southern San Francisco Bay appears to have formed by tectonic subsidence that has occurred over the last 200,000 to 300,000 years (Atwater, Hedel, and Helley, 1977). The bay margin is characterized by relatively flat topography developed on recently deposited unconsolidated alluvial and bay deposits. The bay margin lowlands are bounded to the east by the East Bay Hills formed on faulted and folded Franciscan Assemblage bedrock.

The Midtown planning area is within a region dominated by active faults. The San Francisco Bay area is an area of active seismicity that includes several large right lateral strike-slip faults, including the San Andreas, Hayward, Calaveras, and Sea Cove-San Gregorio faults. Numerous historic earthquakes have occurred within this region causing strong seismic shaking throughout much of the San Francisco Bay area.

LOCAL GEOLOGY

The topography within the Midtown planning area is mostly flat to gently sloping land. On the whole, the area slopes gently to the northwest and transitions from an alluvial fan formed at the base of the Los Buellis Hills to the east to bay lowlands that extend to the north and west. Freshwater basin deposits underlie the majority of the planning area. These deposits are predominantly fine-grained sediments, including clay and silty clay. The remainder of the Midtown planning area is mapped as young and older alluvial fan deposits. Regional subsurface information (DWR 1975) indicates that the sediments that underlie the planning area are predominantly fine-grained Quaternary deposits to depths of at least 550 feet. However, the regional information also indicates the presence of a buried stream channel deposit (between elevation 0 and -50 feet) in the area north of Calaveras Boulevard. These deposits probably represent an abandoned channel of Berryessa Creek. This deposit would be expected to contain more coarse-grained sediments (e.g. sand and gravel).

As an urbanized area, the natural topography has been modified by earth excavation and filling. As part of these operations, it is possible that natural depressions, including former drainage channels, have been leveled through the placement of fill. The extent (area and depth) of potentially filled areas cannot be accurately determined without subsurface investigation, which would occur on a site-by-site basis. Likewise, the geotechnical integrity of fills cannot be determined. In general, most fills placed before the 1950s do not meet engineering standards considered acceptable today. However, the existing topography throughout most of the planning area mimics the natural topography, thus fill areas are likely to be localized features (i.e., the possible location and extent of fills cannot be mapped or confined to a particular location in the Midtown planning area). The Midtown planning area has also been characterized as having a high potential for liquefaction (Earth System Consultants 2000).

Groundwater is encountered at relatively shallow depths throughout the planning area. Uppermost groundwater levels are typically encountered at depths of less than 20 feet (Rodgers and Williams 1974). In general, the quality of water in the uppermost water-bearing zones is poor, affected by high total dissolved solids (TDS) content and locally degraded by release of pollutants to the subsurface.

SOILS

Soil is generally defined as the unconsolidated mixture of mineral grains and organic material that mantles the land surfaces of the earth. Soils can develop on unconsolidated sediments and weathered bedrock. The characteristics of soil reflect the four major influences on their development topography: climate, biological activity, parent (source) material, and time. These factors of soil formation are relatively uniform throughout the planning area. The surface soils of the planning area have been mapped and described (USDA 1968) by the U.S. Soil Conservation Service (currently known as the Natural Resources Conservation Service). The planning area is broadly designated as Group II, which occur in areas that are dominated by very deep, level, somewhat poor to poorly drained soils. The planning area contains two general soil associations, the Sunnyvale-Castro-Clear Lake association and the Orestimba-Willows association.

The dominant soils of the Sunnyvale-Castro-Clear Lake association are dark gray to very dark gray, slightly calcareous silty clay at the surface with calcareous clayey subsoil. Comparatively, the Orestimaba-Willows association soils are characterized as grayish brown clay loam or silty clay loam surface soils underlain by dark grayish brown to olive gray clay subsoils. The soils of both associations have relatively low permeability and high shrink-swell potential. The soils typically have very slow runoff and negligible erosion hazards due to the gentle topography on which they develop.

SLOPE STABILITY

The planning area occupies a gently sloping/flat (less than one percent) northwest-sloping alluvial surface. These flat slopes could become unstable under static or psuedostatic (seismic shaking) conditions, if exposed in unsupported cut or fill faces. Exposed cut and fill faces are not present in the area. Therefore, unstable slopes are not present or expected within the planning area.

LAND SUBSIDENCE

Land subsidence is generally defined as a downward deflection of the ground surface. Subsidence can be caused by natural causes such as tectonic warping of the earth crust or loss of volume of subsurface materials by compaction or collapse. Subsidence can be induced by removal of fluids (e.g., oil, gas, or groundwater) from subsurface rock or sediments. In the planning area, one to two feet of subsidence occurred during the period 1934 to 1967 as the result of groundwater withdrawal and lowering of groundwater levels from the freshwater aquifers in the Santa Clara Valley (Poland and Ireland 1988). Much more severe subsidence (up to eight feet) occurred over this period in the central portion of the valley. The subsidence has been abated by recovery (rising) of water levels in the aquifer as the result of better groundwater management. Continued land subsidence is not expected and is not, therefore, discussed further in this evaluation.

SEISMICITY

The Working Group on California Earthquake Probabilities (WGCEP 1999) has estimated that there is a 70 percent probability that one or more large earthquakes (Magnitude 6.7 or greater) will occur along one of the major fault zones (San Andreas, Hayward, Calaveras, or Rodgers Creek) in the San Francisco Bay area during the 30-year period of 2000 to 2030. The level of active seismicity results in classification of the area of seismic risk Zone 4 in the California Building Code.

The following paragraphs provide further discussion of the specific hazards associated with seismicity.

Surface Rupture

Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace, although there have been some cases where supposedly inactive faults have experienced displacement during earthquakes centered on nearby faults. No active faults have been mapped in the Midtown planning area. Therefore, potential for fault rupture within the Midtown planning area is negligible, and the area is not located within an Alquist-Priolo Special Study Zone.

Ground Shaking

Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions control the extent of ground shaking.

The planning area would experience substantial ground shaking during expected earthquakes on seismic faults within the region. The Hayward could generate a maximum magnitude 6.9 earthquake. Violent ground shaking would be expected at the planning area during such an event. Very strong shaking would occur during expected earthquakes generated on the Calaveras and San Andreas faults.

Estimates of the peak ground acceleration have been made for the planning area based on probabilistic models that account for multiple seismic sources. Under these models, consideration of the probability of

expected seismic events is incorporated into the determination of the level of ground shaking at a particular location. The expected peak horizontal acceleration (with a ten percent chance of being exceeded in the next 50 years) generated by any of the seismic sources potentially affecting the area, including Midtown, is estimated by the California Division of Mines and Geology as (Peterson and others, 1999) greater than 0.7g.[1]

Liquefaction

The Midtown planning area has been characterized as having a high potential for liquefaction (Earth Systems Consultants 2000). During moderate to strong ground shaking, certain types of saturated sediments can undergo a type of failure referred to as liquefaction. During liquefaction, elevated pore water pressures cause a complete and sudden loss of strength and the sediments are transformed from a solid to liquid state. In a liquid state, the sediments have no bearing capacity and can flow. The results of flow can include collapse or settlement of the ground surface. Damage or collapse of structures built in areas affected by liquefaction can occur. The potential for liquefaction in the planning area is increased by the high groundwater conditions that saturate young, unconsolidated sediments. Although the majority of sediments are fine-grained and cohesive, characteristics that inhibit the potential for liquefaction, these deposits are expected to contain coarser-grained alluvial sediments that could be susceptible to liquefaction.

3.2.2. THRESHOLDS OF SIGNIFICANCE

Based on the Environmental Checklist Form contained in Appendix G to the CEQA Guidelines, the proposed Specific Plan could have a significant geologic or seismic impact if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: (1) rupture of an earthquake fault; (2) strong seismic ground shaking; (3) seismic-related ground failure, including liquefaction; or (4) landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- Be located on expansive soil creating substantial risks to life or property.

[1] Percentage of acceleration under gravity.

3.2.3. ENVIRONMENTAL EVALUATION

As described in the setting portion of this section, the likelihood of several of the potential impacts addressed in the thresholds of significance related to geologic or seismic conditions would be negligible within the planning area (e.g., fault rupture, slope stability, erosion). The following sections address the remaining geologic and seismic considerations.

SEISMIC HAZARDS

Expected earthquakes on major regional active faults would generate moderate to violent seismic shaking throughout the City of Milpitas. A major earthquake centered on the nearby Hayward Fault would be expected to generate violent groundshaking in the Midtown planning area. Within the planning area, deep, unconsolidated Quaternary deposits would be expected to amplify seismic shaking. The seismic shaking could result in substantial structural damage to existing buildings and to buildings built in the future. Substantial non-structural damage could also occur. Structural and non-structural damage would result in severe economic losses and could potentially cause injuries or loss of life. As a recent example, a Magnitude 5.2 earthquake in Napa County, California resulted in damage to approximately 5,000 structures and an estimated $50 to 60 million of economic loss. Seismic shaking within the planning area during a Magnitude 7.0 earthquake on the Hayward Fault would be substantially greater than that experienced in the Napa County earthquake.

In addition to the violent ground shaking caused by potential earthquakes, liquefaction of soils during earthquakes poses a hazard to structures in the planning area. The hazard is rated as high in the Midtown area, and would depend on site-specific soil and groundwater conditions. Liquefaction results in a loss of bearing strength for foundations, which can result in structural damage to buildings and hazards to people.

The City of Milpitas building permit process requires that all structures and constructed soils be designed in accordance with the most recently adopted California Building Code. The California Building Code requires that soil conditions at proposed building sites be classified and evaluated by a qualified professional for design of building foundations. Within Seismic Zone 4, the evaluation is required to determine the potential for seismically induced liquefaction and soil instability during seismic. A report on the evaluation of soil conditions ("soils report") must be prepared and submitted to the building official prior to issuance of a building permit.

Although risk of damage during strong seismic shaking would not be eliminated, the risk would be reduced to a level that is accepted throughout the City of Milpitas and most of the San Francisco Bay area with implementation of existing building permit standards to ensure the performance of sound engineering practice, potential seismic hazard impacts will be less-than-significant.

POTENTIAL DAMAGE RELATED TO UNSTABLE SOIL CONDITIONS

Soils underlying the entire planning area have moderate to high shrink/swell potential. This condition occurs when expansive clay soils undergo alternate cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes substantially. These soils present the potential for adverse effects on structures and other improvements if not properly addressed in design and construction

of improvements. In addition, fill material with unknown geotechnical properties may be present within the planning area on a site-by-site basis. It is not possible to determine the exact location of potential fills without individual site investigation, and potential for fill areas cannot be confined to a particular location within Midtown. If not properly engineered, the fill may have low bearing strength and may be compressible. Compression or consolidation of the fill may result in settlement of foundations, pavements, or utilities. Structural damage, warping, and cracking of roads and sidewalks could occur if the potential expansive soils is not considered during design and construction of improvements.

In addition, the high water table present in the Midtown area could affect the structural integrity of planned improvements and adjacent structures if not properly addressed through engineering practices during the construction process.

As previously noted, the City of Milpitas building permit process requires that structures be designed in accordance with the standards set forth in the most recently adopted California Building Code. The required report must include a determination of the expansive characteristics of soil at a development site. Foundations for structures resting on soils with an expansive index greater than 20 as determined by Uniform Building Standard 18-2 are required to include special design consideration. In addition, the City requires that each site-specific soils report include an analysis of the water table at the development site, and provide engineering solutions to address potential impacts during the construction phase. The soils report are also required to investigate the potential for artificial fill and presents design requirements for managing the potential for consolidation or compression of the existing fill and underlying native materials.

With continued implementation of these building standards to ensure the performance of sound engineering practice, potential impacts related to expansive soils and unstable soil conditions will be less-than-significant.

CHAPTER 3.3. HAZARDOUS MATERIALS

This chapter describes the potential for hazardous materials to be present at sites within the Midtown planning area based on current and historical land uses. An environmental database records search was also completed for the Midtown planning area (EDR 2000). A copy of the records search is on file with the City of Milpitas Planning and Neighborhood Preservation Division.

3.3.1. EXISTING SETTING

REGULATORY FRAMEWORK

Numerous laws and regulations impose requirements on the management of hazardous materials; federal, State, and local agencies enforce these requirements. The United States Environmental Protection Agency (US EPA) is the federal administering agency for hazardous waste regulations. State agencies include the California Environmental Protection Agency (Cal EPA) Department of Toxic Substances Control (DTSC), the San Francisco Bay Regional Water Quality Control Board (RWQCB), the California Air Resources Board (ARB), and the Bay Area Air Quality Management District (BAAQMD). Local regulatory agencies include the City of Milpitas Fire Department (MFD), the Santa Clara Valley Water District (SCVWD), and the Santa Clara County Department of Environmental Health, Hazardous Materials Compliance Division (SCCDEH). A description of these agencies' jurisdictions is provided in Appendix C.

HISTORIC LAND USES ASSOCIATED WITH HAZARDOUS MATERIALS

A review of historic aerial photographs and topographic maps indicates that land uses at and adjacent to the Midtown planning area have evolved from predominantly agricultural uses to residential and industrial uses over the past 100 years, with accelerated residential and industrial development following the construction of freeways in the 1950s and 1960s.

In the first available topographic map, dated 1899, the San Jose Branch of the Southern Pacific Railroad extended through the community of Milpitas adjacent to Main Street. Land use appeared to be predominantly agricultural, with only a handful of small buildings present, which were likely farmhouses and outbuildings, except for structures concentrated along the Railroad and Main Street just south of Calaveras Avenue.

In the 1943 topographic map, the Union Pacific Railroad (then the Western Pacific), which forms the eastern boundary of the Midtown planning area, had been constructed east of the Southern Pacific Railroad. Development in Milpitas had expanded north of Calaveras Avenue; however, land use in the entire southern portion of the Midtown planning area, beginning a few blocks south of Calaveras Avenue, appeared to remain agricultural.

The Ford Automobile Assembly Plant was identified in the first available aerial photograph from 1956. A variety of development, including industrial, residential and agricultural, was located south of Capitol Avenue between Main Street and the Southern Pacific Railroad. Also present was a railyard, including

three rail car switching lines on the west side of the Union Pacific Railroad, just south of Calaveras Avenue. Interstate 680 (Highway 17) had been constructed, including on- and off-ramps and overpass structures at Calaveras Avenue and Montague Expressway (then Trimble Road).

In the 1961 topographic map, several rail-switching lines had been added to the railyard, which extended from Curtis Avenue north to Calaveras Avenue along the Union Pacific Railroad. The eastern side of Abbott Avenue, north of Calaveras Avenue had been developed, and the Elmwood Rehabilitation Center was present (this site had been identified as an Alms house and County Farm on previous topographic maps). The high voltage aerial transmission lines that traverse the portions of the Midtown planning area in the north and east were on this map as well.

In the 1965 aerial photograph, warehouse-size buildings had been constructed along the south side of what would become Montague Expressway between Capitol Avenue and Gladding Court, as well as north of Curtis Avenue and along Hammond Way.

In the 1968 topographic map, land along both sides of Calaveras Avenue and Abbott Avenue, within the Midtown planning area, had been developed. Large buildings had also been constructed in previously vacant portions of the southeast corner of the Midtown planning area. Additional development had taken place in the southern portion of the Midtown planning area by the 1980 topographic map and 1982 aerial photograph.

CURRENT LAND USES ASSOCIATED WITH HAZARDOUS MATERIALS

Industrial and light industrial land uses are present on either side of and in between the existing railroad tracks, as well as most portions of the Midtown planning area south of Great Mall Parkway and Montague Expressway. One exception is the former location of the Ford Automobile Assembly Plant, which has been redeveloped as a shopping mall and residences.

Identified industrial land uses within Midtown associated with hazardous materials include the railyard and rail lines, truck yards, auto wrecking yards, electro-plating facilities, and construction yards. Several commercial facilities associated with hazardous materials use, including gasoline stations and auto repair shops, are also located within the Midtown planning area.

Land uses in areas adjacent to the Midtown planning area are primarily residential. Exceptions include industrial parks (light industrial) located along the eastern border of the Midtown planning area between Calaveras Boulevard and Montague Expressway, and the southern border of the Midtown planning area from Main Street to Capitol Avenue.

SENSITIVE RECEPTORS IN AND ADJACENT TO THE MIDTOWN AREA

Sensitive receptors are populations that are especially susceptible to the effects of hazardous materials. Sensitive receptors include children, the elderly, and the infirm. Areas where sensitive receptors would be expected to be located include residential areas, hospitals, day care facilities, nursing homes, and schools. Several areas potentially containing sensitive receptors are located in and adjacent to the Midtown planning area, including a residential area north of Calaveras Avenue that includes a church and

a senior center, as well as commercial and residential areas along Abel Street and Main Street between Calaveras Avenue and Great Mall Parkway that include church, childcare, and youth activity facilities.

REPORTED HAZARDOUS MATERIALS RELEASES IN THE MIDTOWN AREA

Reported releases of hazardous materials within and near the Midtown planning area were identified from an environmental database report prepared by EDR, Inc., an environmental information service (EDR 2000). The database report compiles listings for sites within a one-quarter mile radius of the Midtown planning area, based on information available in federal, State, and local regulatory agency databases pertaining to hazardous materials use at the time of the records search. This report is available for review at the City of Milpitas Planning and Neighborhood Preservation Division. Many of the hazardous material release cases have not been closed by a regulatory oversight agency, indicating that investigation and/or remediation of the reported release had not been completed.

A figure summarizing the findings of the hazardous materials database is provided in Figure 3.3-1, which is provided at the end of this chapter. This figure does not show exact locations of hazardous materials incidents, and should only be used as a planning level guide in understanding the breadth of potential hazardous material concerns.

OTHER POTENTIAL HAZARDOUS MATERIAL ISSUES

Agricultural Chemical Residues

Much of the Midtown planning area was under agricultural cultivation from at least 1899 (the date of the earliest available historical information) until residential and industrial development of the area was largely completed around the early 1980s. During these years, reporting of agricultural chemical use, storage, or disposal was not required, and no records of agricultural chemical use for Midtown are available.

Prior to the 1940s, inorganic compounds (containing metals such as arsenic, copper, or mercury) were commonly used as herbicides, insecticides, and fungicides. Beginning in the 1940s, a variety of organic compounds became commonly used. Some of these agricultural chemicals may not rapidly break down into harmless byproducts; potentially harmful residues may be present in soils for decades after application. Soils in areas near former farm outbuildings, where agricultural chemicals may have been stored, mixed, or disposed of, may have high concentrations of agricultural chemical residues as a result of spills.

Most of these sites are now developed. However, several parcels that were previously used for agricultural purposes have yet to be developed, including the vacant parcels next to the Elmwood Rehabilitation Center and along Abel Street.

Hazardous Building Materials

Asbestos and lead may be present in building materials in older buildings within the Midtown planning area. Asbestos, a known human carcinogen, was commonly used in building materials until the early 1980s, when its use in the United States began to be phased out. Asbestos fibers can be released to the air from asbestos-containing materials (ACMs) when they are disturbed during demolition or renovation activities.

Lead oxide and lead chromate were commonly used in paints until 1978, when regulations limited the allowable lead content in paint. Lead is a suspected carcinogen, a known teratogen, and a reproductive toxin. Loose and peeling lead-based paint is classified as a hazardous waste and must be removed prior to renovating or demolishing a structure. Paints that are adhering to their surfaces do not require abatement and can be disposed of as regular construction debris regardless of their lead content.

Buildings that were constructed prior to the early 1980s could contain hazardous building materials. In the Midtown planning area, these buildings are primarily located along South Main Street and Abel Street.

Electromagnetic Fields

Electromagnetic fields (EMF) are not hazardous materials; however, because they have been identified as a potential human health hazard, they are briefly discussed here. Pacific Gas and Electric (PG&E) high voltage aerial transmission lines traverse the Midtown planning area in two locations, across the northern tip and in the southeast corner of the Midtown planning area. The locations of these transmission lines are shown in Figure 3.3-2, which is provided at the end of this chapter.

There has been public concern about the potential health effects, particularly leukemia in children, associated with electromagnetic fields (EMFs) from such sources as transmission lines, electrical facilities, and appliances. Since 1980, more than ninety epidemiological studies have been performed to determine the link, if any, between EMF and potential health effects. As recently as June 24, 1998, a working group of scientists organized by the National Institute of Environmental Health Sciences, which administers the Electric and Magnetic Fields Research and Public Information Dissemination (EMF RAPID) Program (established by Congress under Section 2118 of the Energy Policy Act of 1992), concluded that "the scientific literature provided no conclusive and consistent evidence to show that exposures to residential electric and magnetic fields produce cancer, adverse neurobehavioral effects, or reproductive and developmental effects."

As no health effects of EMF have been conclusively demonstrated, there are no health-based standards for EMF exposure. There are also no federal, State, or local standards or regulations limiting exposure to EMF. PG&E, the electric power service provider in Milpitas, is regulated by the California Public Utilities Commission (CPUC). In response to public concern about possible health effects of EMF from electric utility facilities, the CPUC opened an investigation of the hazards. On November 2, 1993, the CPUC issued Decision 93-11-013, which recognized the public concern, but which declined to adopt any specific numerical standard in association with EMF until a firm scientific basis for adopting a particular value is established. In that decision, the CPUC directed all publicly owned utilities to take EMF reduction steps on transmission, distribution, and substation facilities to reduce exposure of the public to

magnetic fields. In response, PG&E or other publicly owned utilities must demonstrate the EMF reduction measures for facilities before the CPUC approves facilities for construction. It is assumed that this requirement would remain in effect for future projects undertaken by PG&E or other publicly owned utilities in the Midtown planning area.

As there are no health-based or regulatory risk standards for EMF, evaluating the current or potential effects of EMF would necessarily be speculative in nature. The CEQA Guidelines state that if, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (CEQA Guidelines Section 15145). Pursuant to this section, the assessment of the effects of EMF is limited to the qualitative discussion above.

3.3.2. THRESHOLDS OF SIGNIFICANCE

Based on the Environmental Checklist Form contained in Appendix G to the CEQA Guidelines, the proposed Specific Plan could have a significant impact related to hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.
- Result in the potential accidental release of hazardous materials into the environment.
- Result in the emission or handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would create a significant hazard to the public or environment.

3.3.3. ENVIRONMENTAL EVALUATION

SOIL AND GROUNDWATER CONTAMINATION

Implementation of the Midtown Specific Plan would include demolition or renovation of existing structures, if present, and excavation and grading of soils for construction of foundations. If structures with underground facilities were proposed, dewatering of groundwater may be required. Contaminated soil and groundwater, if present, could expose construction workers and/or the public to hazardous materials. As noted in the existing setting section, the potential presence of contaminated soils in the Midtown planning area is high in many areas.

Soils throughout the Midtown planning area could be disturbed during project construction. The soils may contain a variety of chemical compounds associated with fuels, oils, solvents, metals, agricultural chemicals, or other hazardous substances originating from historical and/or current land uses. Soils containing naturally occurring asbestos may also be encountered during site development. Contaminated soils encountered during site development activities, such as excavation and grading, could result in potential health risks to construction workers and/or the public.

Known releases of hazardous materials to the subsurface may also have impacted groundwater quality within the Midtown planning area. In addition, chemical compounds present in groundwater may have migrated from their original source area and affected groundwater quality at surrounding properties within the Midtown planning area. If contaminated groundwater were encountered during redevelopment activities, potential health risks to construction workers and/or the public could result. If excavations were to extend to the groundwater table, dewatering could be required. Extracted contaminated groundwater would require on-site management and/or treatment.

Under a Phase I, the land use history of the subject property and surrounding areas are evaluated to determine if there is evidence that hazardous materials were handled, stored, or disposed at or adjacent to the site. The information gathered during Phase I assessments is valuable in determining the potential for encountering soil or groundwater contamination that could affect the public during construction or operation of development projects.

Impact HazMat-I

Soil and Groundwater Contamination. Development or redevelopment of properties within the Midtown planning area could expose construction workers and/or the public to hazardous materials from existing soil and groundwater contamination during and/or following redevelopment. This is considered a potentially significant impact.

Mitigation Measure HazMat-1: A Phase I Environmental Site Assessment (ESA) shall be conducted in accordance with American Society for Testing and Materials (ASTM) guidelines prior to the approval of development that would involve soil disturbance within 100 feet of any parcel that has been identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, or which has had previous land uses associated with hazardous materials (e.g., industrial sites, gas stations, etc.). Additional investigation may not be necessary for sites which have no record of hazardous materials, past history of land uses associated with hazardous materials, adjacency to such sites, nor surface indications of possible hazardous materials conditions. Figure 3.3-1 provides the general locations of reported hazardous materials sites as of August 2000. For more detail, refer to the Environmental Records Search, on file with the Planning Division (EDR 2000).

The Phase I ESA will include the findings of a site reconnaissance and investigation of prior uses of the property that could have resulted in contamination. If a significant likelihood of contamination is revealed by the Phase I ESA, a Phase II and/or III assessment may be required, which would involve soil and/or water quality sampling and could result in remediation requirements in accordance with State and federal regulations. Implementation of this measure will ensure that this impact is reduced to a less-than-significant level.

HAZARDOUS MATERIAL RELEASES DURING CONSTRUCTION ACTIVITIES

Construction activities within the Midtown planning area may involve use and transport of hazardous materials. These materials could include contaminated soil and/or groundwater, building demolition debris containing lead and asbestos, and fuels, oils, and other chemicals used during development.

Removal/relocation and transportation of hazardous materials at sites during future construction activities could result in accidental releases or spills, potentially posing health risks to workers, the public, and environment. Similarly, removal or replacement of underground storage tanks during site redevelopment could result in the discovery of contaminated materials, posing a health risk to workers and the public, and in accidental releases of hazardous materials during transportation of contaminated materials off-site. However, these activities are extensively regulated by State and federal agencies, which implement regulations that are designed to reduce the potential for foreseeable upset or accident conditions to a less-than-significant level. No mitigation is required.

EXPOSURE TO LEAD AND ASBESTOS FROM BUILDING MATERIALS

Asbestos and lead may be present in building materials in older buildings within the Midtown planning area. Asbestos, a known human carcinogen, was commonly used in building materials until the early 1980s, when its use in the United States began to be phased out. If friable asbestos were present in structures planned for demolition or renovation, persons exposed to airborne asbestos fibers could suffer health risks.

Lead is a suspect carcinogen, a known teratogen (i.e., causes birth defects), and a reproductive toxin. Federal and State regulations govern the demolition of structures where lead or material containing lead are present. The US EPA and DTSC promulgate regulations pertaining to demolition of structures with lead-based paint. For example, the US EPA and DTSC require that lead-based paint be removed prior to demolition if the paint is loose and/or peeling. If the paint is securely adhering to the substrate, the entire material may be disposed of as a demolition debris, which is a non-hazardous waste. Loose and peeling paint must be disposed of as a California and/or federal hazardous waste if the concentration of lead exceeds applicable waste thresholds. Hazardous wastes must be appropriately managed, labeled, transported and disposed of in accordance with local, State, and federal requirements by trained workers.

The federal and State Departments of Industrial Relations, Division of Occupational Safety and Health (OSHA), and California Department of Health Services promulgate the majority of regulations for the protection of workers involved in lead abatement activities. Air monitoring, appropriate respiratory protection and other personal protective equipment for workers, methods of compliance (e.g., engineering and work practices), and other requirements would apply, depending on the extent of a worker's potential exposure to lead.

Asbestos is a known human carcinogen. Federal, State, and local requirements also govern the removal of asbestos or suspected asbestos-containing materials, including the demolition of structures where asbestos is present. The US EPA, federal and State OSHA, DTSC, and the BAAQMD promulgate these requirements. All friable asbestos-containing materials (ACM), or non-friable ACM subject to damage, must be abated prior to demolition in accordance with BAAQMD requirements. Friable ACM must be disposed of as an asbestos waste at an approved facility. Non-friable ACM may be disposed of as non-hazardous waste at landfills that will accept such wastes. As above, ACM wastes must be packaged, labeled, manifested, transported, and disposed of in accordance with local, State, and federal regulations.

Workers conducting asbestos abatement must be trained in accordance with the OSHA Construction Standards and have appropriate Asbestos Hazardous Emergency Response Act (AHERA) training, as

applicable, based on the abatement job. Appropriate containment, work practices, engineering controls, air monitoring, respiratory protection and other personal protective equipment for workers, hazard communication and other requirements may apply under these regulations. The Milpitas Fire Code requires contractors to obtain an Asbestos Removal Permit from the Fire Department for asbestos abatement projects.

Federal and State regulations govern the demolition or renovation of structures where lead or materials containing lead are present. All loose or peeling lead-based paint would require removal prior to demolition. Federal, State, and local regulations also require the removal and proper disposal of asbestos or suspect asbestos-containing materials prior to demolition. All lead-based paint and asbestos removal activities must be conducted by trained workers under direction of an appropriate health and safety plan to minimize potential exposure. Following removal and demolition of these structures, there would be no potential exposure by workers or the surrounding public to hazardous building materials. No mitigation is required.

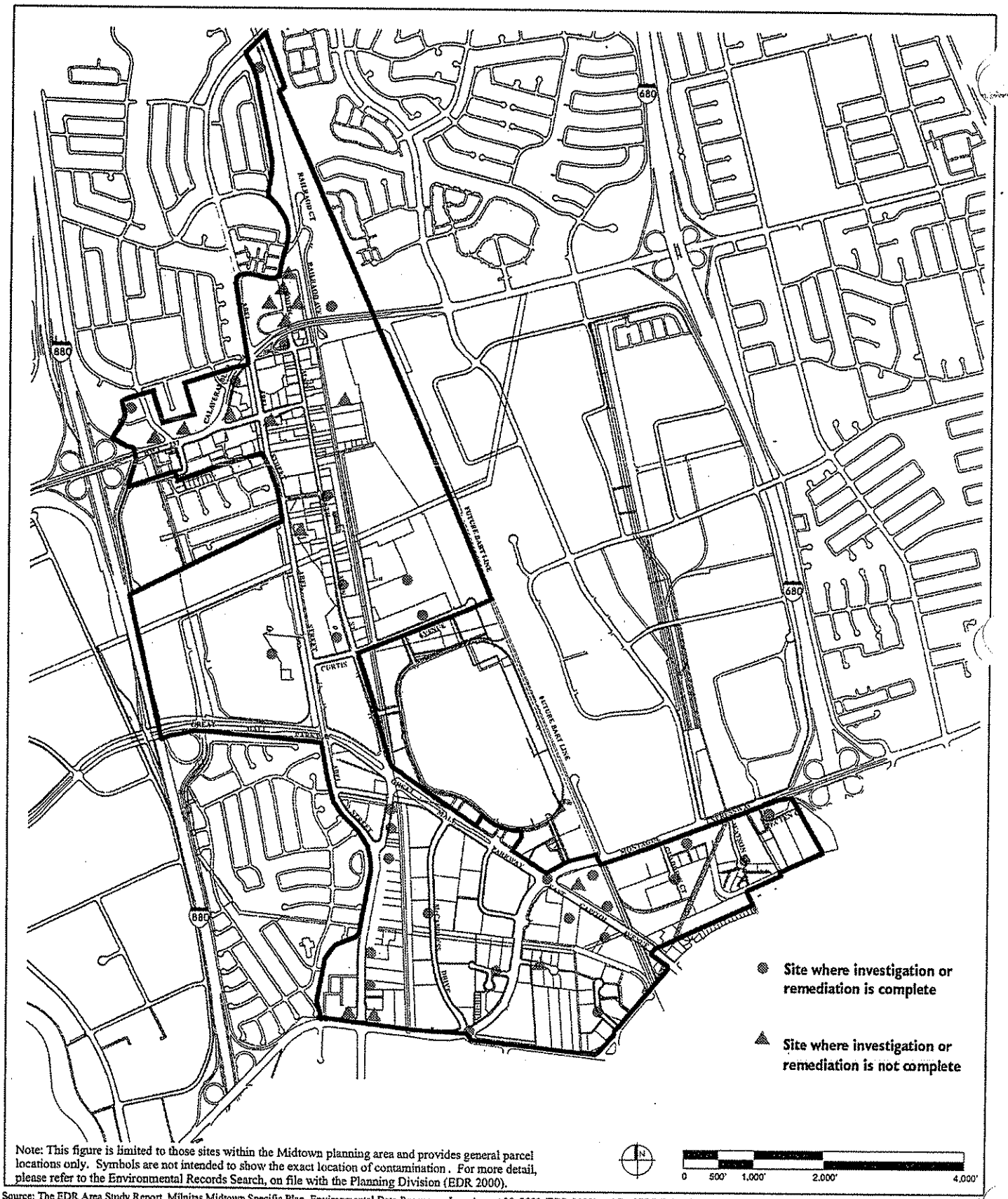
FUTURE USE, STORAGE, AND DISPOSAL OF HAZARDOUS MATERIALS

If future businesses in the Midtown planning area were to use, store, or dispose of hazardous materials, the businesses would be required to comply with federal, State, and local requirements for managing hazardous materials. Depending on the type and quantity of hazardous materials, these requirements could include the preparation of, implementation of, and training in the following plans, programs, and permits:

- Hazardous Materials Business Plan (Business Plan). Facilities that use, store, or handle hazardous materials in quantities greater than 500 pounds, 55 gallons, or 200 cubic feet are required to prepare a Business Plan. The Business Plan would contain facility maps, up-to-date inventories of all hazardous materials for each area, emergency response procedures, equipment, and employee training.
- Hazardous Waste Generator Requirements. Facilities that generate more than 100 kilograms per month of hazardous waste, or more than 1 kilogram per month of acutely hazardous waste, must be registered with the US EPA. DTSC administers hazardous waste generator registration in California.
- Contingency Plan. All facilities that generate hazardous waste must prepare a Contingency Plan. The Contingency Plan identifies the duties of the facility Emergency Coordinator, identification and location of emergency equipment, and also includes reporting procedures for the facility Emergency Coordinator to follow after an incident.
- California Accidental Release Prevention Program (CalARP). Facilities that use substantial quantities of acutely hazardous materials must prepare a Risk Management Program (RMP) if there may be a substantial likelihood that this use could pose an accident risk. The RMP must include a description of acutely hazardous material accidents occurring at the facility within the past three years, a description of equipment, procedures, and training to reduce the risk of acutely hazardous materials accidents, and an off-site consequence analysis that models potential impacts from an accidental release to surrounding areas.

- Injury and Illness Prevention Plan. The California General Industry Safety Order requires that all employers in California shall prepare and implement an Injury and Illness Prevention Plan which should contain a code of safe practice for each job category, methods for informing workers of hazards, and procedures for correcting identified hazards.
- Emergency Action Plan. The California General Industry Safety Order requires that all employers in California prepare and implement an Emergency Action Plan. The Emergency Action Plan designates employee responsibilities, evacuation procedures and routes, alarm systems, and training procedures.
- Fire Prevention Plan. The California General Industry Safety Order requires that all employers in California prepare and implement a Fire Prevention Plan. The Fire Prevention Plan specifies areas of potential hazard, persons responsible for maintenance of fire prevention equipment or systems, fire prevention housekeeping procedures, and fire hazard training procedures.
- Hazard Communication Plan. Facilities involved in the use, storage, and handling of hazardous materials are required to prepare a Hazard Communication program. The purpose of the Hazard Communication program is to provide methods for safe handling of hazardous materials, ensure proper labeling of hazardous materials containers, and ensure employee access to Material Safety Data Sheets (MSDSs).

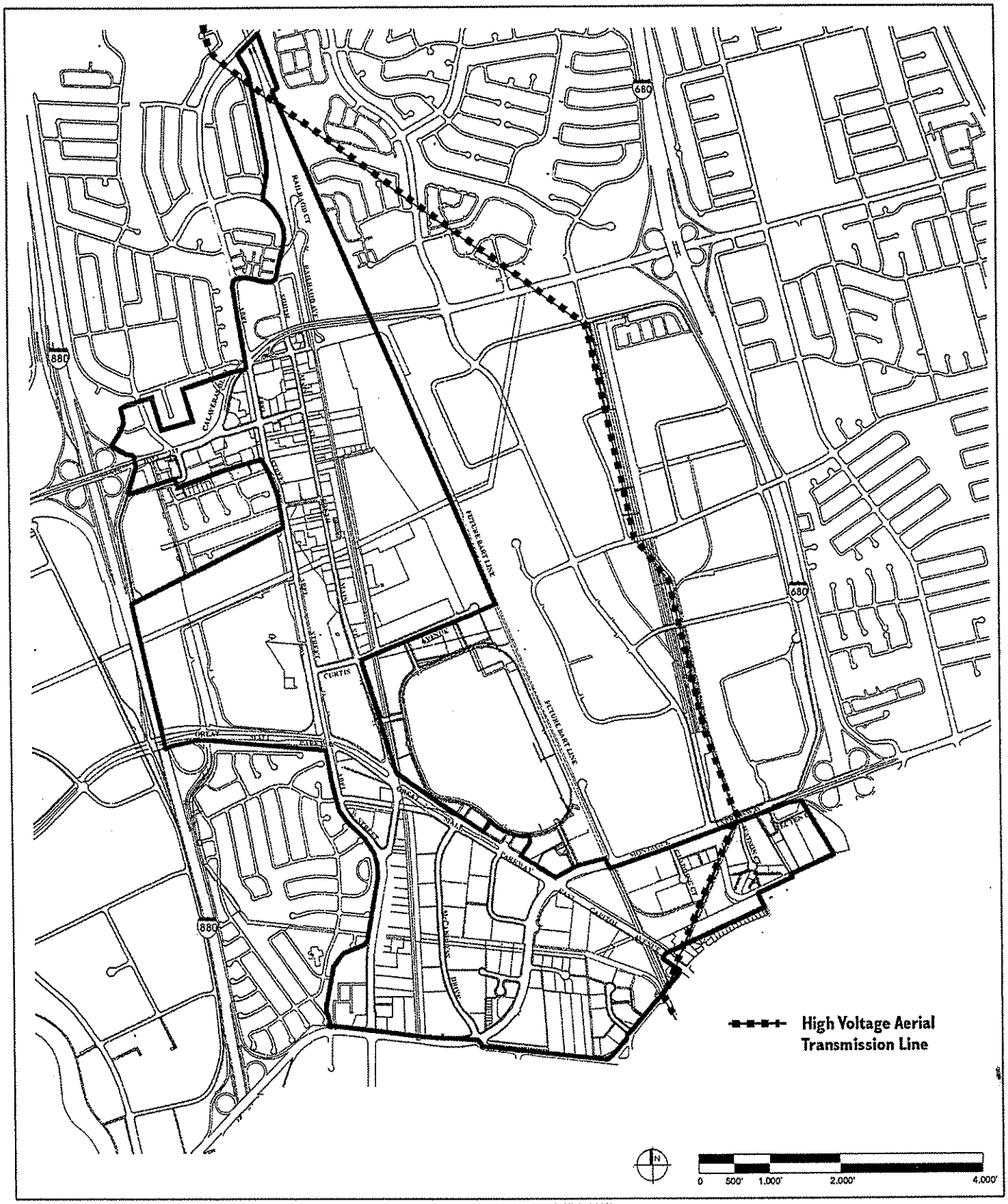
Future land uses in the Midtown planning area may include the use, storage, or disposal of hazardous materials. However, the management of hazardous materials in adherence to current regulations would ensure that hazardous materials were handled properly. Thus, the potential for accidents or improper future use of hazardous materials within the Midtown planning area is considered less-than-significant. No mitigation is required.



Note: This figure is limited to those sites within the Midtown planning area and provides general parcel locations only. Symbols are not intended to show the exact location of contamination. For more detail, please refer to the Environmental Records Search, on file with the Planning Division (EDR 2000).

Source: The EDR Area Study Report, Milpitas Midtown Specific Plan, Environmental Data Resources, Inc., August 30, 2000 (EDR 2000) and BASELINE Environmental Consulting, September 2000.

Figure 3.3-1 Reported Hazardous Material Sites



Source: The EDR Area Study Report, Milpitas Midtown Specific Plan, Environmental Data Resources, Inc., August 30, 2000 (EDR 2000).

Figure 3.3-2 High Voltage Transmission Lines

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CHAPTER 3.4. HYDROLOGY AND WATER QUALIITY

This chapter includes a description of the existing hydrologic setting in and around the Midtown planning area, including current flooding and water quality conditions. Further, this chapter includes an analysis of the potential for flooding and water quality impacts with the implementation of the Midtown Milpitas Specific Plan.

3.4.I. EXISTING SETTING

REGULATORY BACKGROUND

Hydrology and water quality are regulated under overlapping federal, State and local laws, regulations and policies. These are briefly summarized below.

National Flood Insurance Program

The City of Milpitas is a participant in the National Flood Insurance Program (NFIP); thus, drainage and related flooding hazards are managed in response to requirements established by the National Flood Insurance Act of 1986 and the Flood Disaster Protection Act of 1973, as amended. Requirements of the NFIP are subsumed within the Building Code and through overall City and interagency programs for flood hazard management. In implementing the NFIP, the Federal Emergency Management Agency (FEMA) requires that new construction in a flood hazard area meet minimum design standards to place occupied structures above flood hazard areas. A special flood hazard area is defined as a flood plain, which, on average, is likely to flood once every 100 years. Flood hazard boundary areas are mapped on Flood Insurance Rate Maps (FIRMs). Figure 3.4-1 shows the 100-year flood zones as mapped by the most recent FIRM.

Regional Water Quality Control Board

The City of Milpitas is within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB), which administers requirements of the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act. The RWQCB administers a countywide National Pollutant Discharge Elimination System (NPDES) permit to the City of Milpitas, 12 other communities, the County and the Santa Clara Valley Water District. This group comprises the Santa Clara Valley Urban Runoff Prevention Program (SCVURPP). As a member agency, the City of Milpitas is required to implement the program's Storm Water Management Plan to ensure that stormwater runoff from the city does not cause or contribute to a violation of the water quality standards for the south San Francisco Bay.

Large construction projects over five acres require an individual NPDES permit supported by the preparation of a Storm Water Pollution Prevention Plan (SWPPP) for construction of facilities. The SWPPP would be comprised of best management practices for construction of the facilities. Point source discharges that pose a threat to beneficial uses of receiving waters, potentially would violate water quality standards and objectives, or could cause a "nuisance" are also required to comply with NPDES permit requirements.

Milpitas General Plan

The City of Milpitas has a number of policies in its General Plan that address water-related issues. These principles and policies are provided in the Seismic and Safety Element and the Open Space and Environmental Conservation Element, and are summarized below.

5.b-G-1: Minimize threat to life and property from flooding and dam inundation.

5.b-I-1: Ensure that new construction or substantial improvements to any existing structure result in adequate protection from hazards. This includes ensuring that: new residential development within the 100-year Flood Zone locate the lowest floor, including basement, above the base flood elevation; and new non-residential development locate the lowest floor, including basement, above the base flood elevation or incorporate flood-proofing and structural requirements as spelled out in the Municipal Code.

5.b-I-2 Require all structures located within the 100-year Flood Zone to provide proof of flood insurance at the time of sale or transfer of title.

5.b-I-3 Ensure that encroachment into designated floodways does not result in any increase in flooding hazards.

5.b-I-4 Continue working with the Office of Emergency Services to update and maintain the Sandy Wool Lake Dam failure evacuation plan.

5.b-I-5 Seek construction of flood control channels to withstand 100-year floods along Coyote, Penitencia, Berryessa, Scott, Calera, and Los Coches Creeks.

4.d-G-1 Protect and enhance the quality of water resources in the Planning Area.

4.d-G-2 Promote conservation and efficiency in the use of water.

4.d-I-1 Continue implementing the National Pollutant Discharge Elimination System (NPDES) requirements of the Regional Water Quality Control Board - this is implemented through Chapter 16 of the City's Zoning Ordinance.

City of Milpitas Municipal Code

As noted in General Plan Implementing Policy 4.d-I-1, the City of Milpitas implements NPDES requirements through Title XI, Chapter 16 of the City's Zoning Ordinance. In addition, Title VIII, Chapter 2 of the Milpitas Sanitary Code prohibits the discharge of any sewage, industrial waste or other polluted waters into any storm drain or natural outlet or channel unless expressly allowed by a valid NPDES permit. As specified in Chapter 16, allowable discharges must not cause any impairment in the beneficial uses or quality of water of the State as defined in the California Water Code or any special requirements of the RWQCB, or to interfere with the operation of any watercourses with the State (XI-16-4). Property owners are required to provide protection from accidental discharge of prohibited materials or other wastes into any storm drain or watercourse. Furthermore, facilities to prevent accidental discharge of prohibited materials are to be provided and maintained at the owner's expense (XI-16-7).

Prohibited materials include all wastes or pollutants, including but not restricted to sewage, industrial wastes, petroleum products, coals tar or any refuse substance arising from the manufacture of gas from coal or petroleum, chemicals, polluted cooling water, detergents, solvents, paints, contaminated or chlorinated swimming pool water, pesticides, herbicides, and fertilizers (XI-16-4).

The Milpitas Sanitary Code also prohibits the discharge of hazardous and polluted matters into the sanitary sewer system. These restrictions include the prohibition of flammable or explosive substances, grease, oils, solid or viscous matter, corrosive matter, toxic substances, unusual levels of suspended solids, noxious materials, and radioactive matter. The Sanitary Code also specifies requirements for oil and grease devices to be installed where grease or other objectionable materials may be discharged into a public or private sewage main (Title VIII, Chapter 2, Sewer Use Regulations).

Appendix D provides a summary of the City's Sanitary Sewer and Storm Drain Discharge Guidelines. This summary is provided to developers and property owners as a synopsis of the requirements implemented by the City of Milpitas to ensure water quality is not impacted or impaired.

Best Management Practices

In addition to the requirements summarized above, the City also requires the implementation of Best Management Practices for construction and development projects. These can include drainage over vegetative swales, underground stormcepter vaults, inlet filters, catch basins, and fossil filters (with required maintenance contracts to ensure they are maintained by the property owner). Although these Best Management Practices are not adopted by ordinance or resolution, they are typically required through the development review process on a case-by-case basis. Appendix D includes a matrix summary of the Best Management Practices required by the City of Milpitas through the development review process. These are provided by the Santa Clara Valley Urban Runoff Prevention Program (SCVURPP).

HYDROGRAPHY

Precipitation

The average annual precipitation in the Midtown planning area is approximately 15 inches annually, although there is substantial variability from year to year. In the adjacent hills to the east, the average annual precipitation rises to 20 inches. Storm events are largely confined to the period October to May. Storm events typically occur in the low-sun period as cool cyclonic (frontal) systems approaching from the Pacific Ocean. Each storm commonly delivers several inches of precipitation. Heavy precipitation is often associated with cyclonic storms that approach from the southeast. These warm air masses carry substantial moisture and produce intense precipitation as they pass over the region. Flooding becomes a hazard when a succession of frontal storms pass through the area with only short interspersed dry periods to allow runoff to discharge into the creeks and drainage of the soil. As the clay soils of the hills become saturated, they shed the incident rainfall. Thus, when a series of storms pass over the hills, the subsequent storms produce higher amounts of runoff and the discharge into creeks rises rapidly.

Drainage

Milpitas is located in the southeastern portion of the San Francisco Bay basin. The city lies predominantly on the low-lying gently sloping area at the base of hills. The Midtown planning area is located entirely in flat to very gently sloping land that is drained by three, small, intermittent creeks: Wrigley-Ford Creek, Berryessa Creek and Penitencia Creek. These creeks are mapped on Figure 2-16, which is provided in Chapter 2: Project Description. All three creeks are tributary to Coyote Creek. The creeks are largely modified in form to straight trapezoidal channels, and are concrete-lined in places. The structurally channelized watercourses and culverts retain few natural attributes of the original creeks. Berryessa Creek obtains its headwaters in the Los Buellis Hills east of Milpitas, which are almost entirely open space and retain their natural runoff characteristics. The steepness of the hills results in relatively rapid runoff. As the streams emerge from the hills onto the Bay plain, they enter an area of urban development in Milpitas. Penitencia and Wrigley-Ford creeks primarily drain the urbanized low-lying areas of Milpitas.

The urbanized areas, including Midtown, produce high amounts of runoff. This is because of the extent of impermeable surface area that sheds runoff into the storm drainage system. The storm drains discharge the runoff into the creeks. Thus, storm events result in a rapid rise in peak runoff into the creeks.

FLOODING

Because the Midtown planning area is within the lower floodplain areas of local watersheds, it is subject to flood hazards. About one-third of the Midtown planning area is indicated by FEMA as being within the 100-year flood inundation zone, as shown on Figure 3.4-1. The 100-year flood is the largest event likely to occur once every 100 years, that is, the event with a one- percent chance of flood occurrence in any given year. The entire area is located within the 500-year flood hazard zone.

Some of the capacity problems of the storm drainage system and proposed improvements to address these conditions are summarized below.

Berryessa Creek. In the planning area, specifically on Watson Court, some properties experience flooding for events as frequent as the 10-year flood events on Berryessa Creek. To address this problem, in the City's Draft Storm Drain Master Plan proposes the construction of a parallel 24-inch storm drain from the low spot in Watson Court to the existing storm drain system in the Montague Expressway. This is considered a Priority 1 (urgent) solution for implementation in the Draft Master Plan.

Wrigley Creek. Wrigley Creek overtops its bank at the Montague Expressway because of an undersized culvert. The Priority 1 (urgent) Draft Master Plan solution is to construct a parallel 36-inch culvert beneath the Expressway to increase the channel capacity. Wrigley Creek just west of the Great Mall has insufficient capacity to carry the 100-year flood event, and would spill into the Great Mall parking lot. The Priority 2 (next urgent) solution in the Draft Master Plan is to widen the channel and construct a concrete "U" shaped channel to increase the capacity of the creek.

Ford Creek. Ford Creek would overtop its banks in the 100-year event and spill toward Lower Penitencia Creek before being blocked by floodwalls. The inundation would cover the area west of Railroad Avenue north of Carlo Street, and along North Abel Street. Localized flooding from a surcharged 100-year event would affect Sinnott Lane. The Draft Master Plan proposes construction of a parallel 30-inch outfall from a local sag to the creek (Priority 2, next urgent). In Railroad Avenue, an undersized culvert would cause the creek to overtop its banks in a 100-year event. The Draft Master Plan Priority 2 solution is to replace the existing twin 2.5'x4' arch corrugated metal pipe with an equivalent 60-inch pipe. Channel overflow would occur at Calaveras Boulevard in a 100-year event. The Draft Master Plan solution (Priority 2) is placement of a third 72-inch pipe under the street (joining the twin 48-inch pipes as the creek). The Draft Master Plan also includes a Priority 2 solution to widen the existing one-foot wide channel bottom to 20 feet from Calaveras Boulevard to just upstream from Railroad Court.

Lower Penitencia Creek. Nuisance flooding and 10-year event ponding to the top of the curb occur along Abel Street north of Calaveras Boulevard. A Priority 3 (optional) solution in the Draft Master Plan is to construct 30-inch to 42-inch pipes to take the drainage.

It is expected that the preceding drainage projects would be undertaken in the near future regardless of the action taken on the Midtown Specific Plan. The Master Plan is in draft form at present, and has not yet been adopted. Adoption is expected to occur by the end of the year.

As previously described, the City is a participant in the NFIP, which is administered by FEMA. FEMA's NFIP Regulations (October 1, 1995) and the City require that no new construction may be placed in floodplains without either removing the flood restrictions or constructing structures above the base flood level. The first floor elevation of an occupied structure generally must be one foot above the base flood elevation.

Milpitas is also located within the East Zone of the Flood Control Benefit Assessment District. The Santa Clara Valley Water District is responsible for maintenance and measures for flood protection within the Assessment District.

Midtown does not have any flood hazard from a release of waters associated with a failure of the Sandy Wool Lake Dam. I-680 forms a barrier that protects areas westerly of the freeway, including Midtown. Similarly, Midtown is sufficiently elevated and distant from San Francisco Bay to avoid any hazard of tsunami or seiche run-up inundation. Development under the Specific Plan would not expose people or structures to inundation by seiche, tsunami, or mudflow.[1] For these reasons, impacts related to dam failure, seiche, tsunami and mudflow are not discussed further in this EIR.

[1] Tsunami are a series of waves generated by earthquakes, sub-sea earth movements, volcanic eruptions often at great distance from the point of run-up on the shore. Tsunamis are popularly called tidal waves, a misnomer, as they are not related to tidal forces. Tsunami run-up in southern San Francisco Bay is in on the order of 4 feet for the 100-year event (Garcia Andrew, and James R. Houston, 1975, Type 16 Flood Insurance Study: Tsunami Predictions for Monterey and San Francisco Bays and Puget Sounds Technical Report H-75-17 Hydraulics Laboratory, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi). Seiche waves are oscillating waves in confined water bodies. In San Francisco Bay, seiches are not likely to have a run-up greater than a couple feet.

SURFACE WATER QUALITY

Urbanized areas, including Midtown, can contribute substantial nonpoint discharges of contaminants to surface waters. The common contaminants include, but are not limited to, sediment, nutrients (phosphorus and nitrogen), trace metals (e.g., lead, zinc, copper, nickel, iron, cadmium and mercury), oil and grease, bacteria (e.g. coliform), and virus, pesticides and herbicides, organic matter, and solid debris/litter. These substances are generated by a variety of site conditions. Vehicles account for most of the heavy metals, fuel and fuel additives (e.g., MTBE, methyl tertiary butyl ether, is an additive to gasoline that is a hazardous substance and a pollutant of water), motor oil, lubricants, coolants, rubber, battery acid, and other substances (Delzer 1996). Wear and tear on road surfaces generates asphalt and particulate from concrete and aggregate. Excessive fertilizing of landscaped areas generates most nutrients. Vegetation produces organic litter. Animal excreta are sources of coliform. Pesticides and herbicides are widely used in landscaping for keeping right-of-way areas clear of vegetation and pests, e.g., railroad tracks. Like streets, railroad areas are large sources of a wide variety of contaminants, some of them hazardous substances. All these substances are entrained by runoff during wet weather, carried into the storm drains, discharged into creeks and eventually discharged into the San Francisco Bay.

Studies conducted of contaminant loads in Bay area runoff indicate that the first storm event of the season (generally from September to November) produces the "first flush" of pollutants into surface water systems. Urban runoff studies have demonstrated that capturing and treating the first ¼ to ½ inch of runoff results in an 80 to 95 percent capture of the annual runoff pollutants.

GROUNDWATER

The Midtown planning area is generally characterized by relatively shallow groundwater. Groundwater in some areas occurs within 20 feet of the ground surface (Rodgers and Williams 1974). Groundwater is not used for domestic water supply in the area. Because the City is served by a municipal water system which does not depend on local groundwater and because the Midtown planning area is over 90 percent developed, significant impacts to groundwater systems are not expected to occur, and are not further discussed in this chapter. The potential effects that the high groundwater table can have on subsurface construction activities are addressed in Chapter 3.2: Geology, Soils, and Seismicity.

3.4.2. THRESHOLDS OF SIGNIFICANCE

Based on Environmental Checklist Form contained in Appendix G to the CEQA Guidelines, the proposed Specific Plan could have a significant impact related to hydrology and water quality if it would:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Place structures within a 100-year flood hazard area, which would impede or redirect flood flows.

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- Violate any water quality standards or waste discharge requirements.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.
- Otherwise substantially degrade water quality.

DRAINAGE

The proposed development under the Specific Plan would result in small alterations of drainage conditions in the area. The changes would include minor increases in runoff resulting from the development of vacant parcels. Some sites may include larger expanses of landscaping resulting in net reduction of runoff. Additionally, changes in local runoff collection systems related to individual site development plans would be expected (e.g., new or relocated drainage inlets, and small pipes on parcels that would feed into the existing storm drain system). Because the Midtown planning area is flat to gently sloping, substantial grading for project construction would not be expected, and therefore, substantial alteration of the drainage system in the area is not anticipated. While, minor alteration of the storm drain collection systems may result from individual development projects in the Midtown planning area, stormwater discharges would be directed into the existing storm drain system (See Chapter 3.5: Utilities for further discussion on the storm drainage system and anticipated discharges).

Because the Midtown planning area is largely developed at present, the extent of impermeable surface coverage is high. Development in the Midtown planning area would result in a minor increase in impermeable surface area because some open space areas would be converted to uses for structures and parking areas. Runoff in those areas would increase above existing conditions. As discussed in Chapter 3.5, the adoption of the Specific Plan and implementation of projects within its framework would be expected to fall within the planned storm drain system requirements for the area as a whole.

The proposed Specific Plan includes no proposals to alter any of the existing drainage channels. Landscaping and trail development included within the Specific Plan along the edges of the drainage channels would not affect flow capacity or the in-channel configurations and roughness conditions.

In summary, development in the Midtown planning area would result in minor local alterations of the existing drainage system and minor increases in storm runoff. However, implementation of the proposed Specific Plan would not require substantial alterations to the storm drainage system. This is considered a less-than-significant impact. No mitigation is required for this less-than-significant impact.

FLOODING

Approximately one-third of the Midtown planning area is located within a 100-year floodplain, as shown in Figure 3.4-1. The flooding hazard primarily takes the form of ponding of water and overflows of open drainage channels that result in shallow flooding (one to two feet deep). New construction for occupied

structures is required to be constructed at an elevation above the base flood under existing requirements of the NFIP.

During 100-year or greater flood events, some property damage would be expected, but it would be minor. During 100-year flood events, ponded streets and flood entrained debris could impair the movement of vehicles and public transit through the area, and could pose an inconvenience to pedestrians, bicyclists and motorists. These effects are not considered substantial risks.

The development of sites that would be subject to 100-year or greater flood events would not adversely affect adjacent properties, nor would that development impede or redirect flood flows, as the areas designated as flood zones are subject to shallow ponding depths, and would release into the public street before releasing onto adjacent property. Further, any such redirection or increase in ponding depth would be a violation of the City's Flood Plain Management Ordinance and FEMA guidelines, and would not be permitted.

In summary, flooding impacts would not be considered significant in the Midtown planning area because, although flooding would pose an inconvenience, it would not cause a risk to life or property. In addition, implementation of the City's Flood Plain Management Ordinance and FEMA guidelines flooding would hazards would be minimized. No mitigation is required for this less-than-significant impact.

WATER QUALITY

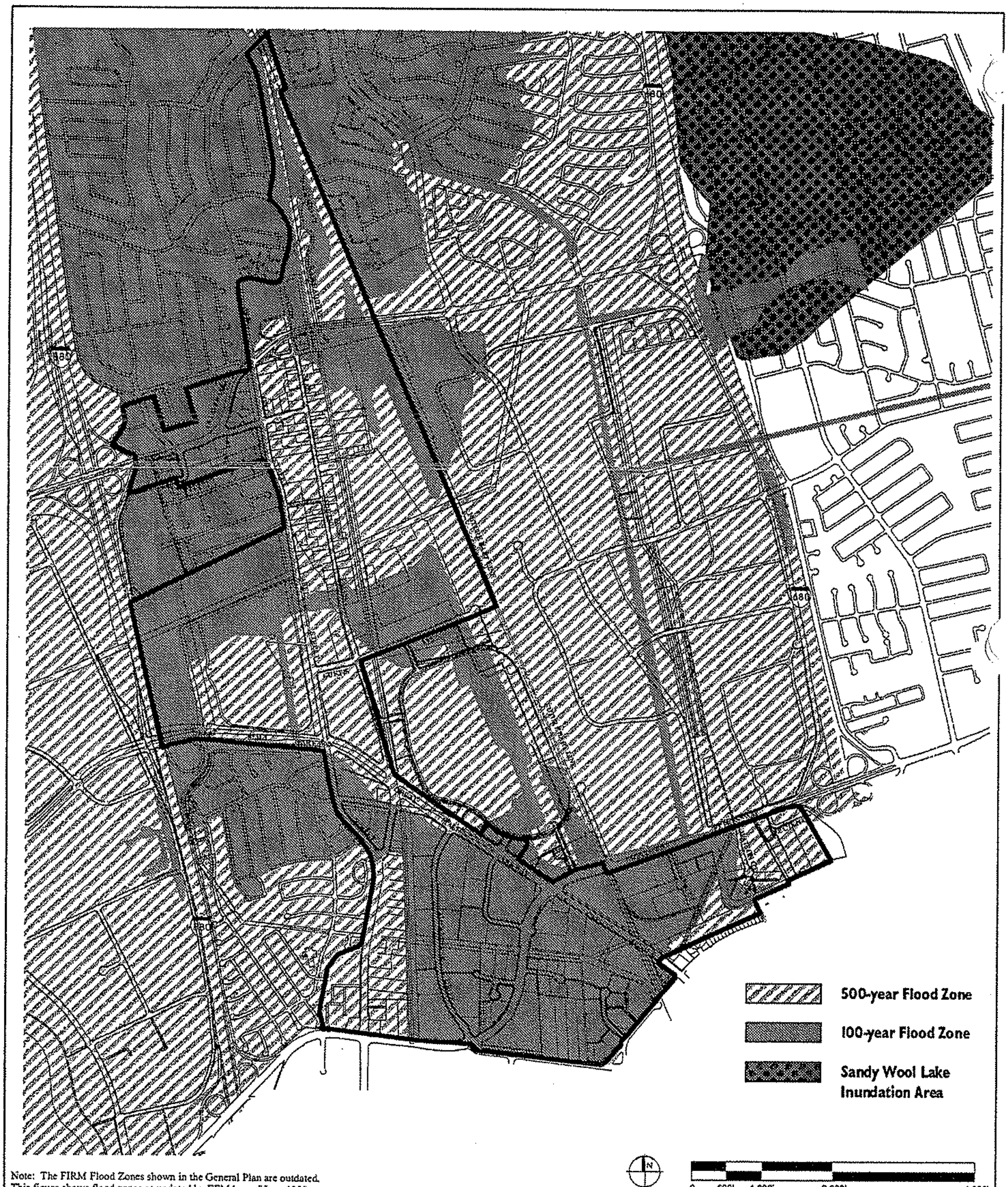
The primary impact of development in the Midtown planning area would be greater population and uses that could intensify the generation of the typical urban water contaminants that exist at present in the area. Additional development in the Midtown planning area could result in greater use of vehicles and the associated increase in contaminant loads that would become entrained in runoff and discharged into receiving waters.

As development occurs in the Midtown planning area, grading and excavation could result in deposition of sediment on street surfaces. Given that the area is flat, relatively minor grading would be expected for most development projects. Additionally, the flat slopes would not be conducive to erosion. Thus, most sediment generation would be expected to be relatively small amounts tracked in vehicle tires or spilled on roadways.

The City of Milpitas implements several regulatory requirements to ensure that water quality would not be impaired through this additional activity and development. These include requiring that sediment be removed before waters are discharged into the storm drain system. Mechanisms for removing sediments include settling tanks or basins, and best management practices implemented during the construction process, as summarized in Appendix D. Through the development review process, the City of Milpitas requires an analysis of whether planned discharge complies with the City's and regional regulatory requirements. Further, a Storm Water Pollution Prevention Plan (SWPPP) is required for construction projects equal to or larger than 5 acres through the RWQCB and the Milpitas permit process. Specific discharge limits are based upon RWQCB's shallow water effluent limits. Discharges are not allowed to cause any impairment in the beneficial uses or quality of water of the State.

In addition to the above requirements, street sweeping occurs on a regular basis in the Midtown planning area to reduce the amount of sediment and trash that could be deposited into surface waters (personal correspondence, Ms. Marina Rush, Associate Planner, City of Milpitas, April 4, 2001).

Although the potential for pollutant discharge would not be eliminated, the discharge within the Midtown planning area would be limited by existing regulations that restrict such discharges. Thus, the potential for significant impacts to water quality would be less-than-significant. No mitigation is required for this less-than-significant impact.



Note: The FIRM Flood Zones shown in the General Plan are outdated. This figure shows flood zones as updated by FEMA as of June 1998.

Source: FEMA Flood Insurance Rate Maps (FIRM), Panels 060344 0001G, 060344 0003 G, June 22, 1988.

Figure 3.4-1 Flood Zones

CHAPTER 3.5. UTILITIES

This chapter includes a description of the existing utility systems in the Midtown planning area, including water, sanitary sewer, storm drainage, and electrical systems. Further, this chapter includes an analysis of the potential environmental impacts the project may have related to the provision of utilities required for the implementation of the Midtown Milpitas Specific Plan. This chapter was developed in consultation with Ruggeri Jensen Azar & Associates (RJA). Hydrological and flooding issues are addressed in Chapter 3.4: Hydrology and Flooding.

3.5.1. EXISTING SETTING

POTABLE WATER SUPPLY

Existing Potable Water Supply and Demand

Potable water supply for the Midtown planning area is provided by the City of Milpitas through its municipal water system. The City provides water service to homes, businesses and industry within the City of Milpitas, meeting the demands of 62,698 residents (US Census 2000a). The City of Milpitas buys domestic water from two sources: the San Francisco Public Utilities Commission (SFPUC), delivered through the Hetch Hetchy Water system, and the Santa Clara Valley Water District (SCVWD), delivered through the South Bay Aqueduct.

Local water from the SFPUC is treated at its Sunol Valley Filtration Plant and water from the SFPUC's Hetch Hetchy supply in the Sierra is chlorinated and pH adjusted, prior to its delivery to the City of Milpitas. Water delivered by the SCVWD is treated at its Penitencia Water Treatment Plant or the Santa Teresa Water Treatment Plant before being piped to the City of Milpitas. The SFPUC water has less dissolved minerals than that of the SCVWD. Due to the incompatibility of the two treatment systems, the water from the two providers is not mixed within the system. Water from the SFPUC is delivered primarily to residential customers east of Interstate 680 and in the area north of Calaveras Boulevard and east of Interstate 880. SFPUC water is also delivered to the Pinewood residential area. The SCVWD water is delivered to industrial and commercial customers westerly of Interstate 680 and south of Calaveras Boulevard, and to the area west of Interstate 880. The SCVWD and SFPUC water are provided in the Midtown planning area in parallel systems. The City also owns and operates one well, which is used as a supplemental source of water in emergency situations for the SFPUC service area.

The City currently has a supply assurance amount from the SFPUC of 9.23 million gallons per day (mgd). This assurance amount equals approximately 10,340 acre-feet (AF) per year. This allocation could be reduced in drought years. In addition, it is anticipated that incremental cost of water supplied by the SFPUC will become more expensive for the City to purchase should the allocation be increased. For these reasons, the City of Milpitas does not anticipate increasing allocations of SFPUC water at this time. In the last fiscal year (July 1999 to September 2000), the City purchased approximately 7,800 acre-feet of water from the PUC. Demands for SFPUC water are anticipated to remain relatively constant after 2004 as the water demands in areas of the city currently supplied by SFPUC stabilize. After 2004, most of the

City's projected increases in water use would be met by SCVWD (personal communication, Mr. Darryl Wong, Principal Civil Engineer, City of Milpitas, October 10, 2000).

Water supplied by SCVWD is derived in-part from executed contracts with the State of California Department of Water Resources and the United States Bureau of Reclamation. The City's contract with SCVWD allows for increases in purchased water to accommodate growth within the city. SCVWD bases its long-term water planning projections on employee and household projections provided by the Association of Bay Area Governments (ABAG). SCVWD responds to new land use plans by accommodating them in their projections for long-term water supply and demand.

In accordance the City's contract, SCVWD provides exact delivery commitments on a three-year delivery schedule based, in-part, on projections made by the City. The most recent delivery schedule provides for the delivery of 5,700 AF in fiscal year 2001-2002. Based upon the most recent water delivery projection submitted to SCVWD, the City is currently anticipating a demand of up to 6,541 acre-feet in 2005-2006. This water delivery schedule assumes a peak day delivery of 685 AF in August 2005. These mid-term projections are provided to the District for operating and planning purposes only (SCVWD 1984).

Water Conservation and Provision of Recycled Water Supplies

Future water demand projections made by the City of Milpitas account for continued implementation of the City of Milpitas' Water Conservation Programs. Currently, the City's Water Conservation Programs include the provision of free low-flow showerheads and faucet aerators to all Milpitas residents, water-wise house calls, the Washer Rebate Program implemented by the SCVWD, and several commercial customer programs, including rebates for the implementation of water efficient technologies and toilet retrofits (City of Milpitas Water Conservation Programs, 2000).

Recycled water is also currently available in Milpitas. The water is provided by the South Bay Water Recycling Program (SBWRP) and is distributed by the City of Milpitas through a transmission line which bisects the Midtown planning area, adjacent to the SFPUC Hetch Hetchy right-of-way and northerly of the Elmwood site. The City anticipates extending recycled water mainlines in and around the Great Mall and the industrial parks south of the Great Mall. Additionally, construction of distribution lines for delivery of recycled water to the Town Center industrial park, McCandless Industrial Park, and in north Milpitas began in Summer 2001. In 2000, approximately 600 AF of recycled water was used in the city of Milpitas. In 2010, the City is expected to use approximately 1,100 AF of recycled water (personal correspondence, Mr. Darryl Wong, Principal Civil Engineer, City of Milpitas, December 14, 2000).

Current City policy is to require new commercial and industrial water users within reasonable proximity of existing recycled water mainlines to use recycled water for landscape irrigation. The policy would be extended to any new development within the Midtown planning area, and would require use of recycled water for new public and private landscaping in the street corridors where conditions permit.

Long-term (2020) Estimated Water Demand

In consideration of conservation efforts and the use of recycled water in the city, the estimated per capita use of 81 gallons per day (gpd) is the current average residential demand (personal communication, Darryl Wong, Principal Civil Engineer, City of Milpitas, October 13, 2000). Further, commercial and industrial users are estimated to require 0.123 gpd per one thousand square feet of office, retail, and highway retail use; 1.10 gpd per thousand square feet of dining use; 0.219 gpd per one thousand square feet of light industrial use; and 0.195 gpd per thousand square feet of child care center use.

The City's projection of required future water purchases is provided in Table 3.5-1. As shown in the table, the total demand for potable water is anticipated to reach 17,220 AF in 2020, of which 9,050 AF is planned to be delivered from SFPUC and 8,170 AF is planned to be delivered from the SCVWD. This projection is in consideration of existing land use plans, without adoption of the Milpitas Specific Plan. The City based this forecast on population projections provided by the Association of Bay Area Governments (ABAG) in their forecasted conditions in 1999 (Projections 2000, December 1999). This estimation is also in consideration of the City's existing recycling and conservation efforts.

Potable Water Infrastructure

The City's water system is currently divided into pressure zones 1 through 4. These designations are based upon water pressure, which is maintained within each pressure zone either by reservoirs on the hillsides or booster pumps on the valley floor. Each pressure zone is further broken down into zones based upon the water supplier. Those served by SFPUC are designated in the existing Water Master Plan (John Carollo Engineers 1994a) as SF zones, while those served by SCVWD are designated SC zones. The Midtown Milpitas Specific Plan is primarily within Zones 1SC and 2SC, with the area north of Calaveras Boulevard in Zone 1SF. Due to the difference in water pressure between zones, the mains within each pressure zone are interconnected, or looped, but not connected to an adjacent zone with a different zone designation without the use of a pressure reduction valve.

The Midtown planning area is bisected by 78-inch SFPUC transmission pipelines, which become 72 and 90 inches in diameter as they flow from east to west. One of these is tapped at a metered turnout known as the "Main Street Turnout" at the intersection of Ford Creek and Hammond Way, which provides water for a portion of the Midtown planning area. There is also a series of mainlines distributing both SFPUC and SCVWD water, which vary in size from 4 to 24 inches in diameter. These existing water pipelines are shown in Figure 2-13 in Chapter 2: Project Description. Water mains of 8 inches in diameter or greater, exist within all of the major streets within the Midtown planning area.

The City of Milpitas Water Master Plan Update (John Carollo Engineers 1994a) made recommendations for some scheduled minor water system improvements to serve the valley floor area, which includes the Midtown planning area. These improvements have been included in the Capital Improvement Program 2001-2006, and are currently programmed for fiscal years 2001-2004.

Table 3.5-1
City of Milpitas Projected Domestic Water Purchases
(in acre-feet per year)

	Fiscal Year				
	1999/2000	2004/2005	2009/2010	2014/2015	2019/2020
Population [a]	65,000	70,200	72,900	75,100	77,100
SFPUC water [b]	7,842	9,050	9,050	9,050	9,050
SCVWD water [c]	4,830	6,450	7,800	8,000	8,170
TOTAL domestic water purchases	12,672	15,500	16,850	17,050	17,220

a Population projections are from the Association of Bay Area Government's (ABAG) forecasted conditions (1999). ABAG population projections are used instead of General Plan population projections because they are a more accurate projection for the longer planning horizon. Approximately half of the Midtown Specific Plan population was assumed in these forecasted conditions.

b Fiscal year 1999/2000 are actual deliveries. Other anticipated purchases are based on City of Milpitas projections (October 2000). This projected allocation is less than the amount of water that could be available from the SFPUC. However, the City of Milpitas is interested in stabilizing the demand from this supplier (rather than increasing demand from this source) as a result of anticipated tiered SFPUC wholesale price structure whereby future water due to new allocations would cost more per unit than existing allocations.

c The fiscal year 1999/2000 delivery amount is the actual delivery commitment made by the SCVWD three-year delivery schedule (SCVWD 1999 and requested revision of July 2000). Fiscal year 2004/2005 delivery projections are based on the Proposed Monthly Water Delivery Schedule (June 26, 2000). Following fiscal year purchases are preliminary projections by the City of Milpitas based upon ABAG (1999) population estimates.

Source: City of Milpitas, October 2000.

The following are the planned improvements to the City's water system (by Fiscal Year): (1) Abel Street Water Line, planned in fiscal year 2004-2005; (2) Hanson Court Water Line, planned in fiscal year 2003-2004; (3) Pectin Court Water Line, planned in fiscal year 2004-2005; (4) Main/Hammond Water Line, planned for fiscal year 2003-2004; and (5) Carlo Railroad Water Line, planned for fiscal year 2003-2004. Hansen Court and Pectin Court water lines are being upgraded due to increased fire flow demands, while the others are being extended to eliminate dead end mains and increase water quality.

SANITARY SEWER

Sanitary Sewer Discharge and Treatment

Sanitary sewer discharge from the City of Milpitas is conveyed through a City-owned and maintained forcemain to the Regional San Jose/Santa Clara Water Pollution Control Plant (WPCP) for treatment, which is operated by the cities of San Jose and Santa Clara. The "Master Agreement for Wastewater Treatment" between the cites of San Jose, Santa Clara, and Milpitas governs Milpitas' rights to discharge wastewater into the WPCP (1983). This Master Agreement is between all three cities. The Master Agreement allows for Milpitas to discharge 12.5 million gallons per day (mgd) average dry weather peak five-day flow (average dry weather peak week flow). The City of Milpitas' Master Agreement accounts for 7.5 percent of the total average dry weather flow capacity at the WPCP.

The Summer 2000 average dry weather peak week flow for the City of Milpitas was 9.24 mgd (personal communication, Mr. Darryl Wong, Principal Civil Engineer, City of Milpitas, January 19, 2001). In addition, a number of development projects have been approved, but not yet built or occupied (as summarized in Chapter 4: Cumulative Impacts). These development projects are projected to utilize another 0.99 mgd average dry weather peak week flow. In consideration of these projects, the total committed average dry weather peak week flow to the WPCP from existing and approved development is approximately 10.23 mgd. Thus, 82 percent of the City's existing wastewater treatment capacity has been committed through existing and approved development.

In 1994 the City adopted the Sanitary Sewer Master Plan (John Carollo Engineers 1994b), which concluded that the Master Agreement entitlement for wastewater treatment of 12.5 mgd average dry weather flow would be adequate to meet buildout of the City. The development that has occurred within the city of Milpitas has outpaced the development that was anticipated in the 1994 study. The City is preparing an updated master plan, which is estimated for completion prior to the end of 2002 (personal communication, Darryl Wong, Principal Civil Engineer, October 10, 2000).

Sanitary Sewer Infrastructure

The City of Milpitas provides sanitary sewer collection service to the entire area within the municipal boundaries of the city. The collection system within the Midtown planning area is comprised of a network of pipes ranging in size from 8 to 54 inches in diameter. The major collectors primarily flow north in South Main Street and Abel Street to a trunk line in Marylinn Drive, which convey flows westerly to a City pump station which then pumps the effluent to the WPCP. High flows from the area are diverted into an overflow sewer (called the Southwest Bypass) which runs westerly between Divot and north of Elmwood.

The City also has several sewer line improvements that have been funded in the upcoming years, as follows: (1) installation of 1,780 linear feet of 18-inch overflow pipe along Marylinn Drive is shown in the current CIP as an active project to be constructed upon completion of further study by the Sewer Master Plan update; and (2) installation of 12,000 linear feet of 36-inch parallel force main to the San Jose/Santa Clara Water Pollution Control Plant is currently under construction and completion is scheduled for Fall 2001.

The existing collection system is shown in Figure 2-15 in Chapter 2: Project Description. In addition, this figure also depicts the planned sanitary sewer system improvements in the Midtown planning area that would be implemented with approval of the Specific Plan.

STORM DRAINAGE

The City of Milpitas owns and maintains a network of underground pipes that drain into creeks, which then flow through the City of Milpitas to convey storm water run-off to the San Francisco Bay. The system also includes lagoons and pump stations owned and operated by the City. Within the Midtown planning area, the streets are improved with curbs and gutters, which collect and channel the runoff into underground storm drain systems. These systems then convey the runoff directly into the creeks through pipes ranging in size from 18 to 60 inches in diameter. The creeks within the Midtown planning area are Berryessa, Lower Penitencia and Wrigley-Ford creeks. The first two are owned and maintained by the SCVWD. Wrigley-Ford Creek is owned and maintained by the City of Milpitas. Figure 3.4-1 in Chapter 3.4: Hydrology and Water Quality shows the locations of these creeks.

A Storm Drain Master Plan is currently being prepared for the City by Schaff & Wheeler (completion scheduled for October 2001). This Master Plan will analyze the capacities of the elements of the existing system and proposes improvements to accommodate flows of anticipated development based upon anticipated infill development and potential changes in land use. Proposed improvements of the Storm Drain Master Plan are prioritized from Priority 1 (urgent) through Priority 4 (optional), and will be incorporated into the Capital Improvement Program budget upon adoption of the Storm Drain Master Plan.

The existing and planned storm drainage pipelines are shown on Figure 2-16 in Chapter 2: Project Description.

About one third of the Midtown planning area is within Federal Emergency Management Agency designated flood zones A, AO-1, and AO-2. These are typically low-lying areas, which are subject to ponding during the 100-year event, when local creeks overflow their banks. More discussion on flooding conditions is provided in Chapter 3.4: Hydrology and Flooding, including a figure that shows the locations of the 100-year flood zone.

ELECTRICITY SUPPLY AND DISTRIBUTION

There is a serious concern regarding the availability of electricity in the region that has resulted from the recent interruptions in power service that are occurring in northern California and the Bay Area. These interruptions in power availability are being caused by a variety of issues which, together, make up what is becoming known as an "energy crisis." The situation is summarized below based on information derived from the August 2000 report to Governor Gray Davis from the California Public Utilities Commission (CPUC) President and the Electricity Oversight Board (EOB) Chairman (CPUC 2000) and several publications available through the California Energy Commission (CEC), such as the Summer of 2001 Forecasted Electricity Demand and Supplies. For more information on the current state of electricity generation and transmission, please refer to these publications, which are available at http://www.cpuc.ca.gov and http://www.energy.ca.gov.

State and Regional Electricity Generation and Transmission

Electric power in California is supplied by a grid system that links power generators inside the State and from out of State sources with the transmission system and local distribution system. As a result of energy restructuring (enacted in September 1996 by Assembly Bill 1890), the transmission system is run by an Independent System Operator (ISO) with oversight by the EOB, and is regulated by the Federal Energy Regulatory Commission (FERC). The flow of electricity is managed by the ISO to ensure that power is transmitted to the users when and where it is needed. The ISO coordinates with the local power provider to determine what supply will be needed at any given time and to direct the power supply into the provider's transmission and distribution system. The provider for Milpitas is Pacific Gas and Electric Company (PG&E).

California's current situation is due in great part to a lack of adequate generation facilities within California. Generation refers to the production of electricity at power plants and other facilities. California has approximately 1,000 generation facilities with approximately 52,000 megawatts (MW) [1] of capacity. The State is able to import an additional 8,000 MW of energy (CPUC 2000). Actual peak demand in Summer 2000 was 53,500 MW (Governor's Office of Communications 2001).

From 1985 to 1990, the utilities did not propose construction of new power plants in California. Conservation programs and the availability of low-cost surplus power from power plants in the Southwest and the Pacific Northwest reduced the need for additional utility plant construction. By winter 2000, it became apparent that a statewide energy supply shortage was imminent. The shortage was exacerbated by a very dry winter in the Pacific Northwest that very substantially reduced the amount of inexpensive hydro-power normally provided to California. Additionally, a number of California power plants were off-line for maintenance and re-powering, and existing limitations on transmission capacity posed additional constraints.

During peak periods, available shortfalls in electricity can result in power curtailment. Curtailment has taken the form of staged alerts that are declared by the ISO. A Stage 3 alert is an indication that involuntary rolling-blackouts may begin at any time. Generally this occurs when supply reserves fall below 1.5 percent.

[1] One megawatt is equal to one million watts.

Stage 3 alert days began January 12, 2001 and have occurred through March 2001. Several rolling black-outs occurred in that period. A more frequent occurrence of alerts and black-outs is expected during the peak load period in summer when high temperatures around the State result in high usage of power for air conditioning and other uses. The greatest demands on electric power historically have occurred in the hot months from June to October.

In the early 1990s, before the State's electricity generation industry was restructured, the California Energy Commission certified 11 power plants. However, three were never built due to market conditions and uncertainty about the future regulatory structure. The remaining eight plants are now generating 952 MW of electricity. No power plants applications were filed with the Energy Commission between 1994 and 1997 (Governor's Office of Communications 2001).

Since April 1999, the Energy Commission has approved 13 new power plant projects with a combined generation capacity of 8,449 MW. Six power plants, with a generation capacity of 4,308 MW are now under construction, with 2,368 MW expected to be on-line by the end of 2001. A summary of these power plants is provided in "California's Energy Story - A Chronology 1976-2001," which is available at: http://www.governor.ca.gov/govsite/pdf/issues/energy_chronology-final.pdf.

In addition, the Governor of California recently directed the California Energy Commission to use its emergency power plant permitting authority to permit new "peaking" and renewable power plants by September 30, 2001. "Peaker" power plants are typically located in relatively small areas, can connect readily to existing transmission and natural gas systems. These plants are called upon to produce power during the peak demand periods of the day, usually in the late afternoon. Several "peaker" power plants for emergency siting have been either approved, or are under review. These are outlined in Table 3.5-2. For more information regarding these projects, please refer to the CEC Web Site: http://www.energy.ca.gov.

In response to the certainty of further power shortages, the Governor has mandated a program to reduce energy consumption by 10 percent, while promoting a stream-lined program to construct new energy generation capacity in the State and encouraging continued voluntary peak period reduction by large energy users (for which the so-called "interruptible customers" obtain a rate reduction) and conversion to energy efficient appliances.

Electricity Distribution

Pacific Gas and Electric (PG&E) owns and operates electric transmission and distribution facilities to serve homes and businesses in the Midtown planning area. PG&E aerial transmission lines traverse the Midtown planning area in two locations, across the northern tip and in the southeast corner of the Midtown planning area (refer to Figure 3.3-2 in Chapter 3.3: Hazardous Materials). In addition, distribution facilities are located throughout the Midtown planning area. The CPUC regulates PG&E.

Table 3.5-2
California Energy Commission Emergency Peaker Power Plant Status

Project	Location	Capacity (megawatts)	Status	Projected Date (On-line)
Indigo Energy Facility	Palm Springs	135	Approved	7/01
Larkspur Energy Facility	San Diego County	90	Approved	7/01
Alliance Century Project	San Bernardino County	40	Approved	8/01
Alliance Drews	San Bernardino County	40	Approved	8/01
Calpeak Border	San Diego County	49.5	Approved	9/01
Calpeak Escondido	San Diego County	49.5	Approved	9/01
Calpine King City	Monterey County	50	Approved	9/01
Hanford Energy Park Peaker	Kings County	95	Approved	9/01
Calpine Gilroy Project	Gilroy, Santa Clara County	135	Approved	9/01
Pegasus Power, Chino Project	Chino, San Bernardino County	180	Approved	9/01

N/A = not available
Source: California Energy Commission, August 3, 2001.

3.5.2. THRESHOLDS OF SIGNIFICANCE

Based on the Environmental Checklist Form contained in Appendix G to the CEQA Guidelines, the proposed Specific Plan could have a significant impact related to utilities if it would:

- Result in insufficient water supplies or require new or expanded entitlement that are not currently planned or provided for.
- Create conditions that would violate wastewater discharge standards.
- Result in a determination by the wastewater treatment provider which serves the project that it has inadequate capacity to serve the project's projected demands, in addition to the provider's existing commitments.
- Result in the need to construct new electrical generation facilities that are not currently developed or planned, the construction of which could cause environmental impacts.

3.5.3. ENVIRONMENTAL EVALUATION

WATER SUPPLY

Although the Specific Plan proposes more office uses in place of previously planned industrial uses (as identified in the City's current land use plan, June 1998), typical office uses generate less demand for water than industrial uses.[2] For this reason, no additional water demand is anticipated from this shift. For this reason, the following analysis focuses on the proposed increase in housing units.

The projected increase in water demand attributable to the increase in housing units anticipated in the Midtown planning area is detailed in Table 3.5-3. In 2020, an estimated 8,750 AF of water would be required from the SCVWD to serve the proposed project in addition to anticipated city growth under existing land use regulations. The increase in housing units would account for approximately 580 AF per year of additional water demand. Currently, the City requests water supply allocations from the SCVWD every three-years; the most recent commitment was for 5,700 acre-feet of water in fiscal year 2001/2002. The long-term (20-year) increase in water supplies requested from the District is an approximate 50 percent increase in demand; the proposed Midtown Milpitas Specific Plan accounts for approximately 20 percent of this increase.

The current SCVWD Integrated Water Resources Plan (IWRP), which addresses long-term water supply and demand, is based upon ABAG's 1990 projections (SCVWD 1997). SCVWD is currently updating the growth projections contained within the IWRP using ABAG's 1998 projections.[3] Adjustments can be made to these projections if there are known changes since the publication of projections being used by SCVWD. SCVWD has been consulted in the analysis of water demands for the proposed Specific Plan, and is aware of the proposed Specific Plan.

When projecting water demand, SCVWD allows for a range of anticipated growth in the cities of the region to account for variability in the actual level of development that occurs. SCVWD's "upper bound" projections (meaning SCVWD's highest projection) for the City of Milpitas include the population projections with the development of the Midtown Specific Plan.

Based on the level of safeguard provided by SCVWD's projections and the fact that the City's contract with SCVWD allows for increases in purchased water to accommodate growth, the water supply allocation that would be required by growth in the City of Milpitas, including growth associated with development of the Midtown Milpitas Specific Plan, could be accommodated by SCVWD. Water supply impacts from the Specific Plan are less-than-significant. No mitigation is required.

[2] Average office water use is equal to 0.123 gpd per square foot, while industrial uses consume 0.219 gpd per square foot, on average (RJA, November 2000).

[3] SCVWD's last update of long-term water planning projections used ABAG's 1998 projections, which is less recent than the 1999 projections consistently used in this Draft EIR. Although there are slight differences in these projections, these differences are not considered substantial and would not change the conclusions of this analysis.

Table 3.5-3
City of Milpitas Projected Domestic Water Purchases
with Land Use Changes Proposed by the Midtown Milpitas Specific Plan

	Fiscal Year				
	1999/2000	2004/2005	2009/2010	2014/2015	2019/2020
Existing ABAG Population Projections [a]	65,000	70,200	72,900	75,100	77,100
Additional Population Growth Anticipated with Midtown SP [b]	-	3,200	6,400	6,400	6,400
Revised Population Growth Assumptions (w/ project)	65,000	73,400	79,300	81,500	83,500
Additional SCVWD water required (in acre-feet per year) [c]	-	290	580	580	580
Total SCVWD water required (in acre-feet per year)	4,830	6,740	8,380	8,580	8,750

a Population projections are from the Association of Bay Area Government's (ABAG) forecasted conditions (1999). ABAG population projections are used instead of General Plan population projections because they are a more accurate projection for the longer planning horizon. Approximately half of the Midtown Specific Plan population was assumed in these forecasted conditions.

b Based upon 2.69 persons per household for multi-family units, as reported by the California Department of Finance (1999). This projection assumes all units would be constructed prior to 2010. Those units that would have been allowed under existing General Plan land use designations have been subtracted from this analysis because they theoretically have been accommodated under ABAG's projections.

c Based upon a per capita use of 81 gallons per day current average residential demand and assumption that effective conservation efforts continue in the future, as projected by the City of Milpitas (personal communication, Darryl Wong, Principal Civil Engineer, City of Milpitas, October 13, 2000).

Source: EDAW, Inc. and RJA, November 2000.

SANITARY SEWER

Table 3.5-4 provides a forecast of the treatment plant capacity allocation that the City of Milpitas would require. This estimate is based upon a long-term analysis developed by the City of Milpitas based on current development patterns, plus the additional effluent that would be attributed to the additional housing units allowed if the Specific Plan is approved. Based upon this programmatic analysis, it is anticipated that the City of Milpitas would require approximately 12.9 mgd average dry weather peak week flow by the year 2020 (this analysis will be further refined with the Sewer-Water Master Plan update). This allocation exceeds the City's current contractual agreement by 0.4 mgd.

Table 3.5-4
Projected Cumulative Effluent Discharge with the Midtown Milpitas Specific Plan
(in mgd average dry weather peak week flow)

	2000	2005	2010	2015	2020
	Population Assumptions				
Population Growth Assumptions (w/o project) [a]	65,000	70,200	72,900	75,100	77,100
Additional Population Growth with approval of Specific Plan	-	3,200 (1,190 du)	6,400 (2,379 du)	6,400 (2,379 du)	6,400 (2,379 du)
Population Growth Assumptions (w/ adoption of the Specific Plan) [b]	65,000	73,400	79,300	81,500	83,500
	Effluent Discharge Projections				
Baseline Anticipated Effluent Discharge (w/o project) [c]	9.24	11.09 [d]	12.1 [d]	12.23 [d]	12.5 [d]
Additional Discharge Attributable to the Specific Plan [e]	-	0.2	0.4	0.4	0.4
Required Effluent Discharge to the San Jose/Santa Clara WPCP	9.24	11.11	12.5	12.63	12.9

a Population projections are from the Association of Bay Area Government's (ABAG) forecasted conditions (1999). ABAG population projections are used instead of General Plan population projections in order to address a longer planning horizon. Although the populations projections provided in the General Plan may have been accurate at the time, the General Plan projections do not account for General Plan amendments since adoption of the General Plan in 1994, nor the relatively recent trend of increased household sizes, which both result in a corresponding increase in City population.

b Population projections are from ABAG's forecasted conditions (1999) plus an allocation for the additional development housing units that would be anticipated with approval of the Midtown Milpitas Specific Plan.

c Baseline includes residential and non-residential uses, and includes current flows plus projected flows from the Sewer-Water Master Plan adjusted to include ABAG projections.

d Preliminary order-of-magnitude estimates provided by Darryl Wong, Principal Civil Engineer, City of Milpitas, October 30, 2000. Order-of-magnitude estimates were provided in average dry weather flow. A conversion ratio of 0.98 was applied to the projected average dry weather flow, based upon historical records, to obtain the dry weather peak week flows presented in this table.

e Based upon a discharge coefficient of 170 gpd per dwelling unit. Assumes negligible delta in anticipated effluent discharge due to displaced users by dwelling units.

du = dwelling units

Source: EDAW, Inc., April 2001.

The WPCP, operated by the cities of San Jose and Santa Clara, does not have current plans for expansion. Thus, the City of Milpitas cannot rely on a future expansion to gain additional capacity rights. Given that the WPCP does not have current plans for expansion, the City of Milpitas has two options for gaining additional capacity at the WPCP, as follows: (1) acquire excess unused capacity from other agencies that are discharging to the plant, or (2) fund, or partially fund, a plant expansion to accommodate additional discharges. (Mr. Randolph Shipes, Deputy Director, Environmental Services Division, City of San Jose, personal communication, November 29, 2000.)

Impact Util-I

Effluent Treatment Capacity. Development that could occur with approval of the Midtown Milpitas Specific Plan would result in an additional 0.4 mgd dry weather peak week flow discharge to the San Jose/Santa Clara Water Pollution Control Plant (WPCP) above the discharge anticipated with the current General Plan. Cumulative growth within the City of Milpitas, could require 12.9 mgd average dry weather peak week flow of wastewater treatment plant capacity in the year 2020, with approval of the Midtown Milpitas Specific Plan. This exceeds the City's current Master Agreement (12.5 mgd dry weather peak week flow) by 0.4 mgd. The additional generation of effluent attributable to the Midtown Milpitas Specific Plan would contribute to this cumulative impact. This is considered a significant impact.

Mitigation Measure Util-1: The following mitigation measures shall be implemented to ensure that wastewater discharge and treatment capacities are available for planned development:

a. The City of Milpitas shall continue to participate in WPCP Action Plan projects to reduce existing wastewater flows, such as low flow toilet installation and water conservation programs. The City of Milpitas shall continue to participate in the South Bay Water Recycling Program, and pursue additional recycled water opportunities whenever available.

b. The City shall continue to monitor for adequate discharge capacity to serve existing and approved development in the city for all development projects, including remodels. The Planning Division shall continue to coordinate with the Utilities Division and require a sewer needs assessment to be completed by the developer prior to any development approvals. The Utilities Division shall continue to keep a running estimate of how much capacity remains citywide to aid in this analysis.

c. The City of Milpitas shall complete the Sewer-Water Master Plan Update (Winter 2002) and implement the feasible recommended infrastructure improvements, including infiltration and inflow reduction measures. Upon completion of the Sewer Master Plan Update, the City of Milpitas shall review the treatment capacity needs and seek additional capacity if warranted. If the available treatment capacity has been reached, the City of Milpitas shall not issue the building permit until additional capacity is acquired.

With the implementation of these mitigation measures, adequate wastewater treatment capacity would be ensured, and this impact would be considered less-than-significant.

STORM DRAINAGE

The land uses planned by the Midtown Milpitas Specific Plan would result in a reduction of runoff flows when compared to the land uses planned through the existing General Plan. This can be attributed to the lower run-off volume that would be experienced with high-density residential development when compared to commercial, office and industrial uses. The Draft Storm Drain Master Plan (Schaff & Wheeler 1999) provides an analysis of the land uses specified in the current General Plan and calculated, through computer modeling, the storm drainage discharge that would be expected. Using the proposed land uses of the Midtown Milpitas Specific Plan, and using the same discharge coefficients for similar uses, the difference in discharge between the existing General Plan and the proposed Specific Plan was a decrease of approximately 13 percent. The adoption and implementation of the Midtown Milpitas Specific Plan would not require construction of any additional storm water system trunk facilities. For this reason, the project would not create or contribute runoff water that would exceed the capacity of the planned stormwater drainage system and no new storm water drainage facilities would be required. Thus, adoption of the Specific Plan would have a less-than-significant impact to storm drainage infrastructure.

Nuisance flooding currently occurs when rainfall run-off exceeds the capacity of local storm drainage facilities and when major creeks and channels overflow due to limited capacity in relation to flood flows. These conditions can be expected to continue with implementation of the Midtown Milpitas Specific Plan.

The correction of existing storm drainage system deficiencies in the Midtown planning area can be reduced with systematic remediation of the local system. As discussed further in Chapter 3.4: Hydrology and Flooding, the correction of existing deficiencies within the system would reduce local ponding and nuisance flooding could be eliminated. However, complete elimination of the localized flooding problem can only be expected when SCVWD improves the channels of the major creeks that drain the greater Milpitas area. These existing flooding conditions do not pose a significant hazard, as further discussed in Chapter 3.4: Hydrology and Flooding.

ELECTRICITY SUPPLY AND DISTRIBUTION

Continued development in the Bay area, and California as a whole, will result in additional demands for electricity. As previously discussed, the State is currently experiencing shortages in electrical supply during period of peak demand. These challenges are being studied and addressed by the State, as previously discussed beginning on page 3.5-7.

As discussed in Chapter 5: Growth Inducement, the proposed Specific Plan would result in an additional 6,400 persons introduced to the Midtown planning area over the next 20 years. This growth would result in an expected total City of Milpitas population of 83,500 in 2020. While this growth may seem substantial, the expected electric power demand for this additional population would be small in comparison to the total demand for power in the region. However, it would contribute cumulatively to the shortfall in electric power that currently exists in California and is expected to continue for at least three more years.

ABAG reports an estimated population of the Bay area of 8,026,900 persons in 2020, which represents an increase of 2,006,753 persons from 2000 (ABAG 1999). The growth that would be attributable to approval of the Midtown Milpitas Specific Plan would be 0.3 percent of the growth in the region. It is important to note that these estimates assume the growth in the Midtown planning area would not otherwise occur in the region if the project were not proposed. Realistically, the growth in energy demands attributable to the proposed project could be much less, as some of this growth would likely occur elsewhere in the region if the proposed Specific Plan were not approved.

Based on the current State population of 35 million, and a peak energy use of 53,500 MW in California in Summer 2000, the per capita peak electricity use is approximately 0.00157 MW. Thus, the peak electrical use attributable to the additional 6,400 residents would be approximately 10 MW. In California, power plants range in size from a generating capacity 40 MW to 1060 MW. Most power plants generate more than 500 MW, although "peaker" plants, which generate power during peak demand periods, generate less than 300 MW. The peak demand generated by growth that could occur with approval of the Midtown Specific Plan would not, by itself, necessitate the construction of a power plant. In addition, although electrical shortages will likely continue near-term, power plants are currently under construction to address California's current imbalance. Supply and demand are anticipated to come into balance by 2004, prior to the majority of the development that is envisioned in the Midtown area. However, shortfalls are expected to continue in the next few summers. As a result, there could be periods of rolling black-outs for the Midtown area. Were black-outs to occur, they could adversely affect normal business and residential activities. However, these would be expected to be more of an inconvenience to customers than the source of significant hazard or environmental impact. Once constructed, the planned power plants are forecasted to address the population growth of the State, including the Midtown planning area. In addition, the Midtown Milpitas Specific Plan includes Policy 6.11, which requires the incorporation of energy-saving devices into new development in order to promote energy conservation.

The Midtown planning area is already urbanized, and is surrounded by similar urbanization; thus, the extension of utility services to an area that has not previously been served would not be required. However, distribution facility upgrades and extensions to currently undeveloped sites would be required. Developers within the Midtown planning area would continue to be responsible for the access and

clearance requirements to utility facilities, as set forth by the CPUC. In addition, if a proposed development would require the relocation of existing transmission or distribution facilities, the developer would be responsible for the costs associated with the relocation of such facilities (PG&E 2000). PG&E is responsible for the analysis and provision of electrical distribution to proposed development on a project-by-project basis.

PG&E would review and analyze electricity distribution needs when specific development projects are proposed in the Midtown planning area. The range of electric system distribution improvements that could be required to accommodate growth may include new distribution feeders, upgrading existing substation line equipment, expanding existing substations, and interconnecting transmission lines.

For the above reasons, the proposed project would not result in environmental impacts related to the provision of electricity. The provision of electricity to the Specific Plan area is considered a less-than-significant impact. No mitigation is required for this less-than-significant impact.

CHAPTER 3.6. PUBLIC SERVICES

This chapter contains a description of the public services in the Midtown Milpitas area, including police services, fire services, schools, and parks. This chapter also describes the potential environmental effects that could result from the expansion of public services that may be required with implementation of the proposed Specific Plan.

3.6.1. EXISTING SETTING

EXISTING PUBLIC SERVICES

Police Services

The City of Milpitas Police Department provides police services to the Midtown planning area. Services are provided from one central station, located at 1275 North Milpitas Boulevard in Milpitas. The Department employs 94 sworn officers and operates 26 marked patrol cars (personal communication, David Rossetto, Commander, Milpitas Police Department, September 20, 2000).

Police protection in the city is provided via four or five "beats," depending on the level of staffing and particular time of day. The Midtown planning area is within Beats 1 and 6. Beat 1 is the primary beat for all areas within the Midtown planning area except for the Great Mall, which has its own separate beat (Beat 6). Beat 1 is continuously staffed by 1 patrol officer. Beat 6 is staffed by two officers during hours of mall operation.

The average response time for the entire city is about 4 minutes, 40 seconds. Highest priority is assigned to emergency calls where life-threatening conditions occur. The target response time to such emergency calls is 3 minutes. Lower priority is given to public safety calls which involve other similar less urgent events. Currently, the average police response time for non-emergency calls within the city is estimated to be approximately 5 minutes (personal communication, David Rossetto, Commander, Milpitas Police Department, September 20, 2000).

Fire Services

The Milpitas Fire Department provides fire protection and suppression services to the Midtown planning area. The Department is also responsible for emergency medical services, rescue services, hazardous and toxic materials emergency response, coordination of City-wide disaster response efforts, enforcement of fire and life safety codes, enforcement of State and Federal hazardous materials regulations, and investigation of fire cause, arson and other emergency events for cause and origin.

The Midtown planning area is served by the recently completed Fire Station Number 1, located at 25 West Curtis Avenue (corner of South Main Street). Fire Station Number 1 is typically staffed with one battalion commander and six firefighters. The station is equipped with one engine and one ladder truck (personal communication, Fire Chief Weisgerber, Milpitas Fire Department, August 24, 2000). The

Insurance Service Office (ISO) rating for the city of Milpitas is Class 3 on a scale of one to ten (one representing the best fire protection and ten representing the worst).

The emergency response time goal of the Fire Department is to deploy one engine to the scene of an emergency within four minutes, as set forth in the Milpitas General Plan. The Department's average response time to all calls is currently below the four-minute response time goal. Because Fire Station Number 1 is within the Midtown planning area, the fire call response time is approximately one to two minutes. If necessary, Fire Stations 3 and 4 would provide additional assistance in the event of a fire, although response times would be 2 to 3 minutes longer than from Fire Station Number 1. The City also receives mutual fire aid from other municipalities under the Santa Clara County Mutual Aid Plan and Bay Area Intercounty Fire Mutual Aid Plan for Local Resources. The San Jose Fire Department and/or the Fremont Fire Department provide mutual aid to Milpitas in emergencies.

Schools

The Midtown planning area is located within the boundaries of the Milpitas Unified School District (MUSD), the Berryessa Union School District, and the East Side Union High School District. The MUSD is a kindergarten through 12th grade (K-12) district serving the majority of the City of Milpitas, adjacent unincorporated portions of Santa Clara County, and a small area of San Jose. A small portion of the Midtown planning area is within the Berryessa Union School District and the East Side Union High School District.

As of September 6, 2000, the MUSD's total enrollment was 9,493 students, including: 5,129 elementary school students (K-6); 1,435 middle school students (7-8); and 2,854 high school students (9-12). The MUSD's existing facilities include nine elementary schools, two middle schools, one high school, and one alternative school.

There are no MUSD schools in the Midtown planning area. Students currently living in the Midtown planning area are enrolled in the three MUSD elementary schools closest to the area (Sinnott, Spangler, and Zanker), Rancho Milpitas and Russell junior high schools, and Milpitas High School (personal communication, Karl Black, MUSD, September 6, 2000). These schools are located at the following addresses:

- John Sinnott Elementary School, 2025 Yellowstone Avenue
- Anthony Spangler Elementary School, 140 North Abbott Avenue
- Zanker Elementary School, 1585 Fallen Leaf Street
- Rancho Milpitas Middle School, 1915 Yellowstone Avenue
- Thomas Russell Middle School, 1500 Escuela Parkway
- Milpitas High School, 1285 Escuela Parkway

For years, the City of Milpitas and the MUSD have assumed that the boundaries of the school districts were contiguous with the boundary of the City of Milpitas. However, it has recently been discovered that a small section west of I-680 and south of Montague Expressway is within the Berryessa Union School

District and the East Side Union High School District. This area includes Pecten, Gladding, and Tarob courts and the south side of Montague Expressway from north of Sango Court to I-680. The Crossings at Montague, a 468-unit apartment complex, is located in this area. Construction has begun on this project.

The Berryessa Union School District serves a community of approximately 45,000 homes and has 8,436 students enrolled in kindergarten through eighth grade (June 2001). Berryessa operates ten elemetary and three middle schools. Total enrollment in the East Side Union High School District is 24,200 (June 2001).

Students in the Berryessa Union School District in Midtown Milpitas would most likely attend the Northwood Elementary School (2760 E. Trimble Road, San Jose) and the Morrill Middle School (1970 Morrill Avenue, San Jose).[1] Northwood Elementary School had a 2000/2001 attendance of 388 students, and Morrill Middle School had a 2000/2001 attendance of 1,008 students (Berryessa Union School District 2001). Berryessa students feed into the East Side Union High School District. High school students in the East Side Union High School District portion of Midtown would attend Independence High School (1776 Educational Park Drive, San Jose). Independence High School serves over 4,200 high school students.

Parks

There are six recreation and/or open space areas within the Midtown planning area totaling approximately 54 acres. However, not all of these areas are publicly accessible. These areas include the following:

1. Golf Range, 27.9 acres (Santa Clara County)
2. YMCA, 1.5 acres (Santa Clara County)
3. Milpitas Senior Center, 1.7 acres, (City of Milpitas)
4. DeVries House, 1.2 acres (City of Milpitas)
5. Berryessa Creek Channel, 5.4 acres (City of Milpitas), and 1.7 acres (Santa Clara Valley Water District)
6. Penetencia Creek Channel, 14.7 acres, (Santa Clara Valley Water District)

In addition, the City maintains a mini-park in the vicinity of the Parc Metropolitan residential development, which is accessed off of Curtis Avenue and Great Mall Drive.

Nearby City maintained parks that are outside of the Midtown planning area but serve its residents include:

1. Pinewood Park, 8 acres
2. Starlight Park, 4 acres

[1] Berryessa Union School District has an open enrollment whereby students can attend any school in the district.

The Milpitas General Plan has a standard of 5 acres of parkland per 1,000 population. Land dedication or in-lieu fees are required equivalent to the 5 acre per 1,000 resident standard, but credit is allowed for up to 2 acres per 1,000 residents for private open space provided in accordance with the criteria specified in the City's Subdivision Regulations.[2] For neighborhood parks, the City's recommended park size is 4 to 10 acres with a service area radius of 3/8 mile. For community parks, the City's recommended park size is 15 to 30 acres with a service area radius of the entire city. With approval of the Specific Plan, the City is proposing a General Plan Amendment that would reduce the parkland standards for the Midtown planning area, as described in more detail in the following sections.

SPECIFIC PLAN RECOMMENDATIONS

The proposed Midtown Milpitas Specific Plan provides policies directed to provide public services in the Midtown planning area. The Land Use section provides parks and open space policies, and the Utilities and Public Services section provides policies related to the provision of other public services. Additional policies related to the provision of parkland are also provided in the Implementation section.

Land Use

The proposed Midtown Milpitas Specific Plan provides for an overall intensification of land uses, and recommends specific policies to address the appropriate provision of parks within the urban context. The Specific Plan provides for a reduction in the current General Plan policy of 5 acres of parkland per 1,000 persons to a ratio of 3.5 acres per 1,000 persons within the Midtown planning area. These policies of the Specific Plan are provided below.

Policy 3.23: Require public parks and open space as conceptually located in Figure 3.2 (provided as Figure 2-8 in Chapter 2: Project Description of this Draft EIR). Park size, design, and layout will be determined through the development review process.

The Midtown Milpitas Specific Plan provides for a significant transition of land use from industrial and manufacturing to residential uses. With the intensification and infill of the area it will be important to provide appropriately scaled parks and open spaces to serve new residents and improve the amenity and livability of the area. One of the clear opportunities in Midtown Milpitas is to improve the creek trail systems as conceptually planned in the City's Trails Master Plan. The parks and open space concept for the Midtown planning area uses the creek trail system to organize the larger park system. In addition, parks are used as a focal point for new residential development and also to celebrate important elements of the cultural landscape, namely the O'Toole Elms and the historic crossroads of Milpitas at Serra and Main.

Policy 3.24: Require new residential development to provide public parks at a ratio of 3.5 acres per 1,000 persons, of which up to 1.5 acres per 1,000 persons can be developed as private or common open space.

Public parks are an important amenity that are critical to the quality and amenity of a neighborhood or district. In Midtown, where higher-density residential development is proposed, new residential

[2] The proposed Midtown Specific Plan and accompanying General Plan Amendment would reduce the parkland requirement in the Midtown area to 3.5 acres per 1,000 residents, as specified in Policy 3.24 of the Specific Plan. Refer to page 3.6-9 for a discussion of this issue.

development will be required to provide public parkland at a ratio of 3.5 acres per 1,000 residents. Up to 1.5 acres per 1,000 persons can be developed as usable on-site common or private open space within new residential developments. The remaining 2.0 acres per 1,000 must be developed as public parkland. Developers of residential projects that are 20 units or less may pay a fee in-lieu of providing parkland.

Policy 3.25: Credit improved linear parks on property owned by public and quasi-public agencies (e.g., Santa Clara Valley Flood Control District) as public parks.

Residential developers may provide for the improvement of linear parks public right-of way (as provided in Milpitas Trail Plan) as part of their park dedication requirement. In this procedure, the City would work with developers to identify parkland needs, establish linear park areas to be improved, and establish improvement costs to be paid by the developer. The City would coordinate with the appropriate public agencies and undertake the park landscaping and improvements.

Policy 3.26: Encourage new or expanding office and public /quasi-public uses to provide publicly accessible outdoor open space (plazas, gardens, arcades) as a part of new development. Ensure that the open spaces are linked to sidewalks or pedestrian paths.

Policy 3.27: Establish a minimum 8,000 sq. ft. civic open space and public gathering place on Main Street, preferably in the vicinity of Serra and Main Street. Provide incentives for development of the Town Square.

Policy 3.28: Establish a minimum 2-acre park in association with the O'Toole Elm allee. Secure a public access easement in association with the O'Toole Elms.

Policy 3.29: Designate the Hetchy Right of Way in Midtown "Park and Recreation."

Policy 3.30: Encourage a ten-acre site to be developed as "Park and Recreation," located on the Elmwood site, adjacent to Penetencia Creek.

Policy 3.31: Improve the City owned property at Carlo and Main Street as a mini-park.

Utilities and Public Services

The Utilities and Public Services section of the proposed Midtown Milpitas Specific Plan provides two general policies directed at the provision of public services and schools within the Midtown planning area, as follows.

Policy 6.17: Ensure that adequate Fire, Police and Emergency Services are in place to serve new development in Midtown.

Development of the Midtown Specific Plan will create additional demands on Milpitas' fire, police and emergency service personnel. Personnel will be required incrementally as new development is approved.

Policy 6.18: Coordinate with the School Districts in planning for adequate public school facilities.

The City will continue to coordinate with the school districts as new residential development is proposed. Under current procedures, development proposals are referred to the school districts for review. At the time building permits are issued, developers must pay impact fees to the district.

Implementation

Several policies addressing the provision of parkland are also provided in the Implementation section of the proposed Midtown Milpitas Specific Plan, as follows.

Policy 7.18: Work with the Santa Clara Valley Flood Control District and the San Francisco Water Department to improve creekside trails and open space for the Penetencia and Berryessa Creek Corridors, and the Hetch-Hetchy right of way.

In 1997, the City adopted the Milpitas Trails Master Plan, which provided a blueprint for a comprehensive network of trails, the majority of which follow the creeks, rail corridors, and utility rights of way that traverse the City. The Santa Clara Valley Water District (SCVWD) and the San Francisco Water Department (SFWD) have policies that permit recreational use of their property provided that the agencies enter into a joint use agreement. The Specific Plan utilizes the creek trail system as a key component of Midtown's park and open space network, and allows residential developers to improve the trail network to meet park dedication requirements.

Policy 7.19: Establish a Midtown park fee account.

A separate account will be established for park in-lieu fees collected from development in Midtown in order to ensure that the fees go toward improving parks and open space in Midtown.

3.6.2. THRESHOLDS OF SIGNIFICANCE

Based on the Environmental Checklist Form contained in Appendix G to the CEQA Guidelines, the proposed Specific Plan could have a significant environmental impact related to public services if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities.
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

3.6.3. ENVIRONMENTAL EVALUATION

The Midtown Specific Plan would result in 4,860 additional housing units, when compared to existing conditions. These additional units would accommodate approximately 13,100 new people.[3] This additional population would require additional public services, including fire, police, schools, and parks. Although the additional demand for these services is not directly considered an environmental impact,

[3] Assumes 2.69 persons per unit, State Department of Finance, 2000.

this need for new services could result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. The potential for such impacts is further explored below.

POLICE SERVICES

Additional police services would be required to serve the increase in population resulting from implementation of the Specific Plan. To maintain the existing police service ratios, the Police Department would need an additional 20 officers to serve the projected population increase of 13,100 additional residents.[4] This demand would not occur at once, but would grow incrementally over the projected 20-year planning period. The Department will continue to add sworn officers on an as-needed basis to provide adequate public safety in Milpitas, including the Midtown planning area. However, the addition of several sworn officers and their related equipment (e.g., police cars) would not necessitate the construction of additional facilities, though there is some likelihood that the Department would expand the substation facility to accommodate additional staffing (personal communication, David Rossetto, Commander, Milpitas Police Department, September 20, 2000). If such an expansion were to occur, it is unlikely that it would result in significant impacts to the physical environment because it is located in an area that has been previously disturbed. However, if and when such an expansion were to occur, it would require separate environmental review and such an expansion would be related to growth within Milpitas, and not directly tied to the Midtown Milpitas Specific Plan. No mitigation is required for this less-than-significant impact.

FIRE AND EMERGENCY SERVICES

Additional fire and emergency services would be required as a result of implementation of the Specific Plan. These services would come in the form of additional personnel required to respond to emergency situations. The higher density multi-family residential units envisioned under the Specific Plan would typically require more fire-fighting equipment and more firefighters in the event of an emergency than typical single-family detached development. The MFD would be able to handle incidents within six story buildings, such as those envisioned under the Specific Plan, given the Department's current inventory of fire-fighting equipment. New multi-story buildings would be required by the department to have a number of built-in fire protections, such as sprinklers, smoke and fire detectors and alarms, smoke-proof stairwells, and standpipes. In addition, any incident beyond the capabilities of the MFD would also trigger a mutual aid response from Santa Clara, Fremont, and Alameda counties (personal communication, Fire Chief Weisberger, October 3, 2000).

Large numbers of high-density residential buildings would necessitate additional staffing loads to provide adequate fire protection and emergency services for all residents in the event of multiple fires in the Midtown planning area. The Department will continue to add firefighters and EMTs on an as-needed basis to provide adequate public safety in Milpitas, including the Midtown planning area, should the levels of development anticipated by the Specific Plan be approved. However, the addition of firefighters

[4] The City's 2000 population was 62,698 residents (US Census 2000). With a current provision of 94 sworn officers, this is equal to 1.5 officers per 1,000 persons. By applying this ratio to a new population of 13,100, the total new demand in the Midtown planning area would be 20 officers.

and EMTs and their related equipment (e.g., fire trucks, ambulances, etc.) would not necessitate the construction of additional facilities or the expansion of existing facilities (personal communication, Fire Chief Weisberger, August 24, 2000). Thus, there are no significant environmental effects related to the provision of adequate fire and emergency services. No mitigation is required for this less-than-significant impact.

SCHOOLS

Milpitas Unified School District

Implementation of the Specific Plan would add approximately 4,860 multi-family dwelling units in the Midtown planning area. Of these, it is estimated that 2,860 would be within the MUSD. MUSD assumes that one student would be generated for every seven market rate multi-family units, and one student for every five below market multi-family units. The District also assumes that 20 percent of all new housing in the city would be below market rate (MUSD 2000b). Based upon these factors, development in the Midtown planning area would generate an additional 441 students over the next 20 years who would matriculate through the MUSD. At any given time (assuming all units were constructed), this would result in approximately 237 elementary school students (K-6), 68 middle school students (7-8), and 136 high school students (9-12), using the MUSD's student ratio assumptions.

Berryessa Union School District

Approximately 2,000 housing units would added to the Berryessa Union School District with implementation of the Midtown Milpitas Specific Plan. The Berryessa Union School District uses the following generation rates for attached units: K-5: 0.029 students per unit; below market rate K-5: 0.315 students per unit; 6-8: 0.012 students per unit; below market rate 6-8: 0.185 students per unit (personal communication, Pamela Dayoff, Berryessa Unified School District, August 31, 2001). Using these rates, the additional housing units anticipated in the Midtown area would result in approximately 172 elementary school students (K-5) and 93 middle school students (6-8) being introduced into the Berryessa Union School District.

East Side Union High School District

Approximately 2,000 housing units would added to the East Side Union High School District with implementation of the Midtown Milpitas Specific Plan. Assuming similar generation rates to the MUSD, these additional housing units would generate approximately 95 new high school students (9-12).

School Impact Fees

California law allows the governing body of a school district to impose a fee on all new development within the District's jurisdiction for the purpose of funding the construction or reconstruction of school facilities. California Government Code Section 65995 limits the amount of school fees to be imposed on new development (as of January 2000) at $2.05 per square foot for residential projects and $0.33 per square foot for commercial project, including office development. The Government Code allows for these fees to be exceeded if a Justification Study is conducted and approved; however, the affected school districts have not completed such a study.