



Town of Atherton General Plan 2019

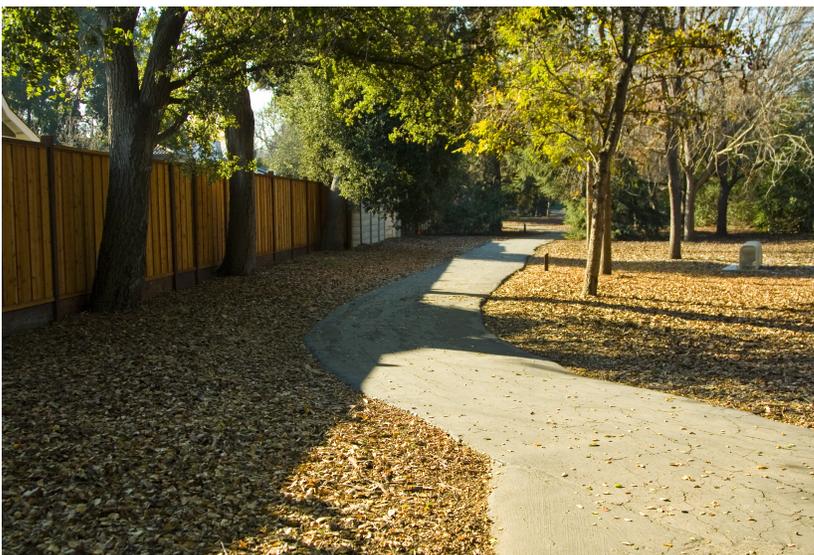


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INTRODUCTION

INTRODUCTION

I. Purpose

In California, General Plans serve as the “Constitution” for all future development in cities and towns. The General Plan provides the fundamental basis for the City’s land use and development policy, and represents the basic community values, ideals and aspirations to govern a shared environment over the life of the General Plan. The General Plan addresses all aspects of development including land use, traffic and circulation, housing, parks and recreation, environmental management and sustainability, and other topics. The General Plan’s policies are implemented through the Municipal Code, which includes the Zoning Title, Building and Construction Title, Subdivision Ordinance and other Town regulations. Town staff in all departments will implement the actions detailed in the plan.

California Government Code Section 65300 requires that the General Plan be comprehensive, internally consistent and long-term. Although it is required to address the issues specified by State law, the General Plan may be ultimately organized in a way that best suits Atherton. The Plan should be clearly written, available to all those concerned with the community’s development and easy to administer. This document supersedes the previous General Plan, adopted in 2002. The Housing Element, however, was independently updated in 2007 and 2014. The Housing Element, adopted by the Town on March 18, 2015 and certified by the California State Department of Housing and Community Development remains in effect.

The overall role of the General Plan is to:

- Define a realistic vision of what the Town desires to be in 20 years.
- Express policy direction regarding the physical, social, economic, cultural and environmental character of the Town.
- Serve as a comprehensive guide for making decisions about land use, circulation, environmental management, parks and recreation, housing, noise, public health and safety.
- Provide the legal foundation for zoning, subdivision and public facilities ordinances, other adopted Town-wide plans, compliance with the California Environmental Quality Act (CEQA) decisions and projects, all of which must be consistent with the General Plan.
- Present a clear and easy to understand format that encourages public participation and understanding.

II. General Plan Content

The General Plan is divided into seven elements:

- **Land Use Element.** The Land Use Element designates where lands can be developed for specific uses such as residential, schools, open space, public facilities and other uses. It also provides development regulations for each land use designation and overall land use policies.
- **Circulation Element.** The Circulation Element specifies the general location and extent of existing major streets and other transportation routes and facilities. It contains plans and policies for a balanced, multimodal transportation network that meets the needs of all users of streets, roads and highways for safe and convenient travel in a manner that is suitable to the context of the General Plan.

- **Open Space and Conservation Element.** The Open Space portion of this Element contains an inventory and description of existing and proposed open space lands and uses and identifies goals and policies that support open spaces in Atherton. The Conservation portion of this Element describes the Town’s natural and man-made resources; including land, water, ecosystems, cultural and living resources. The Open Space and Conservation Element seeks to maintain the low density, residential character of the Town.
- **Housing Element.** The Housing Element is intended to provide for the maintenance and development of housing for Town residents. It is completed pursuant to Government Code Section 65585 et seq, which also requires the Housing Element be updated periodically. It contains analyses of existing housing stock, existing and projected housing needs and quantifications of the number of housing units that may be developed, preserved and improved through its policies and actions. The Housing Element covers the Planning period 2014 to 2022.
- **Community Safety Element.** The Community Safety Element is intended to help prepare the community for risks associated with natural and artificial hazards. It includes mapping of known seismic and other geologic hazards. It addresses evacuation routes and other issues related to identified fire and geologic hazards.
- **Noise Element.** The Noise Element identifies sources of noise and provides for reduction of noise that negatively impacts the community.

Each element of this General Plan contains background information, plan descriptions, and a series of goals, objectives, policies and actions.

- **Goals:** A goal is a description of the general desired result that the Town seeks to create through the implementation of its General Plan.
- **Objectives:** An objective is something toward which an effort is directed; an aim or end of action.
- **Policies:** A policy is a specific statement that guides decision-making as the Town works to achieve a goal. Such policies, once adopted, represent statements of Town regulation and require no further implementation. The General Plan’s policies set out the standards that will be used by Town staff, the Planning Commission and City Council in their review of land development proposals and in decision-making processes.
- **Actions:** An action is a program, implementation measure, procedure, or technique intended to help achieve a specified goal. The Town must take additional steps to implement each action in the General Plan.

III. The Town and its Planning Area

Atherton is part of what has grown to be an almost continuous urban/suburban complex stretching along the western shore of San Francisco Bay between the cities of San Francisco and San Jose. The area known as “The Peninsula” is constrained by the Bay and the Santa Cruz Mountains. Atherton is in the heart of the Mid-peninsula and is bounded by Redwood City on the north side¹, Menlo Park on the east and south side and Woodside on the west. The Town has an area of approximately 3,600 acres or 5.6 square miles; 89% of which is residential, 5% parks and open space, and 6% public and private schools and municipal facilities.

¹ Town residents generally consider that El Camino Real is oriented north-south despite its actual northwest-southeast direction.

Unincorporated communities such as North Fair Oaks, South Fair Oaks, West Menlo Park, and Menlo Oaks abut the Town, however they are not within its Sphere of Influence. A Sphere of Influence is a legal term referring to an area within which a city or town may expand its boundaries and services through the process of annexation. The Sphere of Influence is established by the San Mateo County Local Agency Formation Commission, a governmental agency created pursuant to California Government Code Section 56076, with the purpose of encouraging “logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the county and its communities.” Atherton’s Sphere of Influence is coterminous with the current Town Limits; therefore, there is no opportunity for future annexation of adjoining unincorporated areas without modification of the Sphere of Influence.

IV. Atherton Planning Philosophy

Over the years Atherton has evolved from a collection of country estates into a residential community consisting of larger, and some smaller lots. The Town has committed to maintaining its semi-rural environment. Lot sizes are limited to a minimum of 1 acre. With the exception of El Camino Real, a State Highway, streets are limited to two lanes maximum, generally without sidewalks. Preservation of trees, particularly heritage oak trees, is a high priority. Home sizes, while often large, are tastefully designed, with large setbacks and respect for the native trees and landscaping. While Atherton regulates the placement and height of buildings and structures, it has chosen not to regulate the style or architectural design.

The Town supports the public and private schools that are located within its limits. Public schools are generally exempt from Town regulations. Private schools are regulated under provisions of the zoning ordinance and are limited in site development and enrollment. All schools are encouraged to preserve and enhance their heritage trees. Private schools are requested to voluntarily submit development master plans to the Town for review and advance notice of their plans.

The Town is essentially fully developed and desires to retain its current character. Commercial businesses are not permitted in Town, however, home occupations that do not exhibit any exterior signs of activity are allowed. The Town population has remained at a constant level for the past half century and should continue to remain constant.

Atherton provides a high level of public services to its residents. The Atherton Police Department is committed to maintaining a safe and secure community. The Town maintains a post office in the Town Center for the benefit of residents. The Department of Public Works keeps Holbrook-Palmer Park at a high level of maintenance for use by residents and others. Streets and drainage facilities are well maintained. The Atherton Library, part of the San Mateo County Library system, provides a valuable local service from its location in the Town Center.

V. General Plan Update Process

The 2002 General Plan was updated over a one and one half-year period during 2018 and 2019. During this time, a range of public input opportunities occurred to ensure that the updated General Plan reflected the community’s vision for Atherton. The following describes the public review process.

- **Planning Commission Review and Comments on Administrative Drafts:** Administrative Drafts of each updated element was reviewed from time to time by the Planning Commission during regular Commission meetings. Commission comments were responded to by Staff and changes were incorporated into the Draft Elements.
- **Public Workshop:** Once the Public Review Draft General Plan Update was completed, a public workshop was held on February 23, 2019 to allow members of the public to review and provide comments before the official, State-mandated review period ended and the Planning Commission reviewed the document at a public hearing.
- **Public Review Period and Planning Commission Public Hearing:** As required by State law, the General Plan was circulated for a 45-day period along with the associated environmental document (Initial Study and Mitigated Negative Declaration or IS/MND) during the months of April 2019 and May 2019. During this time, the public was invited to submit written comments, in addition to providing verbal comments at the public workshop, and all of the comments received were taken into consideration at the public hearing held by the Planning Commission on May 22, 2019. The Planning Commission recommended certification of the IS/MND and recommended City Council adoption of the General Plan Update on May 22, 2019.
- **City Council Public Hearing and Adoption:** The City Council held a public hearing on January 15, 2020 at which time it considered the IS/MND and all comments on that document. It also considered the proposed General Plan Update and all of the comments made at the public workshop, the Planning Commission public hearing and the City Council public hearing. At the conclusion of the public hearing the City Council certified the IS/MND and adopted the General Plan Update.

LAND USE ELEMENT

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LAND USE ELEMENT

I. Purpose and Relation to Other Elements

The Land Use Element delineates in written and graphic terms Atherton’s goals, objectives and policies concerning existing and future land uses within the Town’s jurisdiction; what to put where. It should reflect the Town’s vision to remain a low density, semi-rural residential community with a high quality of life. The Element sets forth the general distribution, location and extent of residential, open space, public and quasi-public, and educational land uses. The Element also addresses solid and liquid waste facilities, greenways, and areas subject to flooding. The Element does not include a discussion of land used for business or industry as those land uses are not permitted within the Town of Atherton. Neither does it include the topics of timberland preserve zones or military land uses as there are no timber resources or military installations in or adjacent to Atherton.

While the Land Use and Circulation Elements are the primary General Plan Policy elements, other parts of the Plan contain policies and proposals which relate to the Land Use Element. Elements of the Plan which are related to the Land Use Element include Circulation, Housing, Open Space, Conservation and Noise.

II. Background Information

Land Uses

The Town of Atherton is unique in that it contains primarily lower density residential uses, with no commercial or industrial. The majority of the community over the years have shown interest in preserving this character through the requirement of larger lots and preservation of open space and heritage trees. Atherton contains three different land use categories; residential, open space, and public and quasi-public (which includes educational uses).

Residential Land Uses

Residential areas are designed to contain housing and related facilities such as schools and churches. Residential land uses determine the level of need for schools, public facilities, roads and parks. The Land Use Diagram differentiates residential land uses from parks, open spaces, schools and public facilities.

The **Single Family, Low Density designation** is applied to all residential lands in Atherton. This land use density is intended to minimize environmental damage to sensitive, scenic and open space areas. The conventional single-family detached home is the standard structural type planned for these areas. Additional uses that may be allowed include accessory dwelling units and other compatible uses identified in the Town’s Municipal Code.

Building Intensity is expressed in dwelling units per net acre *and in floor area ratio (FAR – the ratio of a building’s floor area of all main and accessory building to that of its total site area.)*. **Population density** is expressed in people per acre and is derived by multiplying the average population per household by the

dwelling unit density. It is estimated that the population density figures will remain relatively constant through the year 2035¹, although in 2010 the population decreased by 280 from 2000.

The population density in Atherton is approximately 3 people per acre. Planned residential building intensities are based on the number of dwellings per net acre. Net building intensity is defined as the horizontal projection of the gross land area in acres, less the area devoted to the road rights-of-way divided into the total number of residential units. In calculating net building intensity, areas that will be dedicated to permanent open space are included in the gross land area. In the General Plan, building intensity ranges are used to define the broad land use categories. Specific building intensities are designated in the various zoning districts. Population densities were derived by multiplying the population per household by the building intensity range. Population density numbers were rounded to the nearest whole number.

The Zoning Title of the Municipal Code limits the residential building intensity and bulk by the use of floor area ratios, setbacks, height, and other development standards. The Code specifies the maximum amount of gross floor area that can be constructed on residential lots based on lot size. Floor area is defined as the total square footage of all roofed structures on a residential lot, but not including open structures such as arbors.

Future new residential development in Atherton is limited since the Town is primarily built out. The only other residential development possibilities within the Town may be smaller, sub-dividable areas and the few remaining vacant parcels. Any new subdivision would be subject to the minimum development standards of the Atherton Municipal Code.

Table LU-1: Residential Building Intensity and Population Density

Residential Land Use Category	Building Intensity (Units per Net Acre)	Minimum Lot Area per Dwelling (Square Feet)	Population Density	Zoning Reference	FAR
Single Family, Low Density	1	43,560	3	R-1A	18%
	3	13,500	9	R-1B	20-32%

Open Space Land Uses

Open space refers to both used and unused land. It includes developed and undeveloped park lands, visually significant open lands, water areas and wildlife habitat, and undeveloped land which is intended to be retained in an undeveloped state in the future.

Open space land use is generally intended for the following purposes:

- Outdoor Recreation

¹ ABAG Projections 2013, population per household for Atherton: 2010 = 2.80, 2020 = 2.81, 2030 = 2.84, 2035 = 2.87

- Natural Resources
- Managed Production of Resources
- Public Health and Safety

The California Government Code also requires local general plans to address open spaces for military support and Native American tribal resources. However, there are no military facilities in or near Town and no known Native American tribal resources in or near Town. Therefore, these topics are not included in this Element.

Lands designated for Open Space on the Land Use Diagram within the category of Outdoor Recreation include Holbrook-Palmer Park, the Town Center Park, and the Menlo Circus Club. Lands designated for Open Space on the Land Use Diagram within the categories of Natural Resources and for Public Health and Safety include the Bear Gulch Reservoir potable water storage facility. Although no lands in Atherton are designated for Open Space on the Land Use Diagram within the category of Managed Production of Resources, the issue of groundwater use as well as concerns related to potential land subsidence, declining water levels, and saltwater intrusion are addressed in the Open Space and Conservation Element. All of these topics are addressed in greater detail in the Open Space and Conservation Element.

Lands designated for use as open space on the Land Use Diagram are zoned Parks and Open Space (POS) District and include Holbrook-Palmer Park, the Bear Gulch Reservoir property and other sites located throughout Town. In addition, some of the lands zoned Public Facilities and Schools (PFS), as well as many privately held parcels contribute to the Town's inventory of space.

Public, Quasi-Public, and Educational Land Uses

The **Public, Quasi-Public, and Educational** land use category typically includes the types of activities and facilities which are generally recognized to be more conveniently provided by public or quasi-public agencies than by the private sector. Such uses include utilities such as water, sewer and power, basic facilities such as local government and schools, and services such as police and fire protection. Lands designated for public and quasi-public use on the General Plan Map are zoned PFS.

Town administrative functions are currently located in several buildings grouped at the corner of Ashfield Road and Station Lane. The existing buildings are proposed to be replaced with a **new Town Center** complex consisting of an administration building, Atherton Library, and the historic City Council Chambers. The existing Public Works Building and Corporation Yard are proposed to be retained in their current location. The administration building will house a new City Council Chambers, the Town Administrative Staff; City Manager and City Clerk; City Attorney; Finance Department; Police Department; Permit Center; Building Department; Public Works Department; Planning Department and Town Arborist. The new Atherton Library will replace the existing facility with an expanded and updated building. The Historic Town Hall building will be a part of the new Library. Ashfield Road and Dinkelspiel (Station) Lane are proposed to be rerouted to accommodate the new Town Center complex. The existing Reading Park is being reconstructed as the new "Town Center Park" and its landscaped space to serve the dual function of a stormwater retention treatment basin during wet weather. A "Reading Garden" and quiet reading

deck will be connected to the new library, as well as a “Civic Court”, which will include open space and gardens, all of which function as the new Town Center Park.²

The Park and Recreation office will continue to be located in the Main House Building at Holbrook-Palmer Park.

The Town of Atherton has its own **police** force, while **fire protection** is handled by the Menlo Park Fire Protection District. Public **library** facilities are provided by a branch of the San Mateo County Library, located on Dinkelspiel (Station) Lane.

Public elementary schools in Atherton fall under the jurisdiction of three separate school districts: Redwood City, Menlo Park and Las Lomas. The number of primary school age children has increased somewhat over the past 10 years as indicated by U.S. Census Data. However, the increase has been accommodated within existing or expanded schools. Public secondary school students generally attend Menlo/Atherton High School and Woodside High School, which are administered by the Sequoia Union High School District.

There are six **private schools** in Atherton located on three campuses. Sacred Heart Schools on Valparaiso Avenue includes a preschool, a kindergarten, a lower and middle School and a high school. Menlo School on Valparaiso Avenue has a middle school and a high school. Menlo College on El Camino Real is a four-year college. Private schools in Atherton are requested to submit Campus Master Plans to the Town for public information purposes. The Master Plans are required to be reviewed annually. Conditional Use Permits for new or relocated buildings and facilities are required to be consistent with the Master Plan.

Greenways

Greenways are defined as pedestrian and bicycle, nonmotorized vehicle transportation, and recreational travel corridors that meet certain specific requirements including landscaping, separation and protection from shared roadways, public accessibility, and others as specified in California Civil Code 816.52(b). Atherton’s adopted Bike/Pedestrian Master Plan includes proposals for the development of two Greenways through the Town; the Grand Boulevard Greenway and the Bay-to-Ridge Greenway.

The **Grand Boulevard Greenway** proposal involves a major overhaul to El Camino Real by (in most cases) converting the westernmost southbound travel lane to a Class I (off-street) trail with landscaping and pedestrian crossing improvements. The Grand Boulevard Greenway project concept is to provide dedicated bicycle and pedestrian facilities, and transit access improvements, along the length of El Camino Real within Atherton by repurposing a vehicle travel lane in one or both directions. Further study is required prior to project implementation.

The **Bay-to-Ridge Greenway** proposal includes a Class I bike trail and pathway improvements to Marsh Road/Middlefield Road/Watkins Ave, plus bicycle boulevard and greenway linkages along or adjacent to the Atherton Channel across El Camino Real to Alameda de las Pulgas. West of El Camino Real, this greenway can be implemented as a bicycle boulevard and/or Safe Routes to School project via Alejandra

² Source: DPW

Avenue/Park Lane/Camino al Lago or on adjacent facilities to be determined in coordination with adjacent schools and Menlo Park. Further study is required prior to project implementation.

Table LU-2: Area of Land Uses in Acres

Land Use Category	Building Intensity (Units per Net Acre)	Area in Acres	Zoning Reference
Single Family, Low Density	1	2,994	R-1A
	3	165	R-1B
Parks and Open Space	n/a	171	POS
Public Facilities and Schools	n/a	234	PFS
Total		3,564	

Infrastructure

The Town’s **water supply** comes from the City and County of San Francisco operated Hetch Hetchy System. The water supply is delivered by the California Water Service Company. **Sewage** is collected by the West Bay Sanitary District and Fair Oaks Sanitary District for transmission to treatment facilities located in the eastern portion of Redwood Peninsula in Redwood City and operated by Silicon Valley Clean Water; a joint powers authority consisting of the cities of Belmont, Redwood City, San Carlos, and the West Bay Sanitary District. The responsibility for **stormwater** drainage management falls under the jurisdiction of the Atherton Channel Drainage District, the Town of Atherton, and the San Mateo County Flood Control District. Stormwater treatment measures and infrastructure falls under the jurisdiction of the Town of Atherton and other public and private landowners.³ Pacific Gas and Electric Co. furnishes natural gas and electricity to Atherton.

Solid waste and recycling generated by the Town of Atherton is collected and handled by a contractor, which hauls the waste to the Shoreway Environmental Center (a recycling and transfer station) in San Carlos and then to a disposal site at the Corinda Los Trancos “Ox Mountain” landfill north of State Route 92 and Skyline Boulevard. The Shoreway Facility is owned by the South Bayside Waste Management Authority, a joint powers authority with twelve member agencies. The Ox Mountain facility is licensed to accept mixed municipal solid waste, construction/demolition, agricultural, industrial, and other wastes. The facility has an estimated capacity of 60.5 million cubic yards and is estimated to reach capacity by

³ Source: CD+A

approximately 2034. Liquid wastes are collected by the West Bay Sanitary District and Fair Oaks Sanitary District and transmitted to facilities operated by Silicon Valley Clean Water in Redwood Shores.

Areas Subject to Flooding

There are no areas within the Town identified as flood prone according to the Federal Insurance Administration.

Climate Action Plan

Atherton's proposals and policies related to climate change are contained in its adopted⁴ **Climate Action Plan**. The Town's Climate Action Plan (CAP) serves as a guiding document to identify methods that the Town and community can implement to reduce greenhouse gas (GHG) emissions. The Plan provides a comprehensive roadmap of programs that can be implemented to reduce emissions and increase sustainability. Transportation aspects of the CAP are addressed in the Circulation Element. Energy, stormwater,⁵ water and solid waste programs and policies are addressed in the Open Space and Conservation Element.

Atherton has adopted a target of reducing GHG emissions to 15 percent below 2005 levels by 2020.

Energy and water-saving measures can help reduce Greenhouse Gas (GHG) emissions and impacts from drought conditions. Building energy use is the sector with the most immediately achievable and affordable reduction opportunities. A primary focus of the CAP is on residential energy efficiency strategies to reduce existing GHG emissions and on the implementation of new building standards which encourage new home builders towards designing net zero energy homes. Transportation emissions make up the second highest contributor, so measures that allow for changes in the traditional transportation system to reduce vehicle miles traveled and the modes of transportation types will also be important measures in the Town working towards reducing their carbon footprint.

Reducing the amount of waste deposited into the landfill through material reuse, reduction, and recycling is an important strategy to reduce GHG emissions. Waste reduction and recycling help reduce emissions and the amount of single-use materials. The Town has demonstrated compliance with minimum waste reduction regulations to date.

Density Bonus Program

The Town has adopted a program incentive for the production of housing for lower income and senior households by providing density bonus and other concessions or incentives to encourage the construction of low-income housing. Density bonuses allow more units per acre than would otherwise be permitted. Other concessions may include the reduction or waiver of permit fees or other fees, and/or the provision of financial assistance in construction public improvements.

⁴ Adopted October 19, 2016

⁵ Source: CD+A

III. Goals, Objectives, Policies and Actions

Goal LU-1:	To preserve the Town’s character as a scenic, semi-rural, thickly-wooded residential area with abundant open space.
Objective LU-1.1:	To establish a framework for determining the location and extent of land uses within the Town’s area of interest.
Objective LU-1.2:	To limit the nature of land uses to those which are compatible with the overall land use planning goal LU-1.
Objective LU-1.3:	To retain the quality of life, character and existing in the Town’s residential neighborhoods.
Policy LU-1.1:	Future plans for residential development or redevelopment are severely limited due to the fact that the Town is almost entirely developed.
Policy LU-1.2:	The development of high density and/or high-rise residential structures or commercial uses of any kind would destroy the scenic, semi-rural and open space character of the Town, and is, therefore, prohibited.
Policy LU-1.3:	Minimum new lot sizes in hillside areas (defined as areas with average cross slopes greater than 20 percent) shall be related to the slope and shall not be less than:

Table LU-3: Minimum Lot Sizes in Hillside Areas

Average Cross Slope	Minimum Lot Size
0 – 19%	1 Acre
20 – 34.9%	2 Acres
35% +	5 Acres

Policy LU-1.4:	Structures higher than 34 feet shall be prohibited.
Policy LU-1.5:	Proposed residential subdivisions as well as proposals to replace existing homes, shall adhere to the following design criteria: <ul style="list-style-type: none"> A. Maintenance of existing neighborhood environments shall be promoted by the design of the subdivision and subdivision improvements. Designs shall be visually harmonious and compatible with neighborhood character. B. Adequate drainage and off-street parking shall be provided. Street lighting shall be kept to a minimum. Temporary or guest on-street parking areas shall be minimized.

- C. Uniformity of lot design should be avoided by using such techniques as meandering streets.
- D. Trees shall be preserved to the maximum extent feasible while allowing for construction within established parameters for setbacks and lot coverage in accordance with the Municipal Code chapter regulating removal of and damage to heritage trees.
- E. Residential land uses shall be designed in accordance with the density, floor area ratio, height, bulk and other standards established by the Town.
- F. All utilities installed in conjunction with new subdivisions shall be placed underground.
- G. Residential land uses shall be consistent with the goals, objectives and policies of the Atherton General Plan Housing Element.
- H. *Accessory* dwelling units are permitted when consistent with adopted standards.
- I. Privacy is a factor which shall be incorporated into subdivision, subdivision improvements and home design.
- J. The Town allows minimum lot size subdivisions only where such minimum lot sizes do not significantly degrade established levels of privacy, wooded areas, and/or the open space environment.
- K. Residential improvements shall follow the model policies developed for the San Mateo Countrywide Stormwater Pollution Prevention Program and the Town's Green Infrastructure Plan⁶ to minimize the discharge of pollutants into the waterways.

Policy LU-1.6: The Town shall continue to preserve the open space characteristics of existing schools, churches, and park facilities

Policy LU-1.7: Land uses which diminish the open space character of the Town, such as commercial and high-density residential uses, shall be prohibited.

Policy LU-1.8: Maximize preservation of heritage trees and existing trees within a development site to the greatest degree feasible, consistent with the Heritage Tree Ordinance and Tree Preservation Standards and Specifications. Require new development to comply with the Town's requirements for tree protection, removal, and replacement.

Policy LU-1.9: Identify and implement green infrastructure opportunities for stormwater management including those recognized in the Town's Green Infrastructure Plan. Green infrastructure facilities should reflect the Town's visual semi-rural character.⁷

Goal LU-2: Build a Town Center that will serve as a cohesive grouping of public buildings to meet the needs of 21st Century governance.

⁶ Source: CD+A

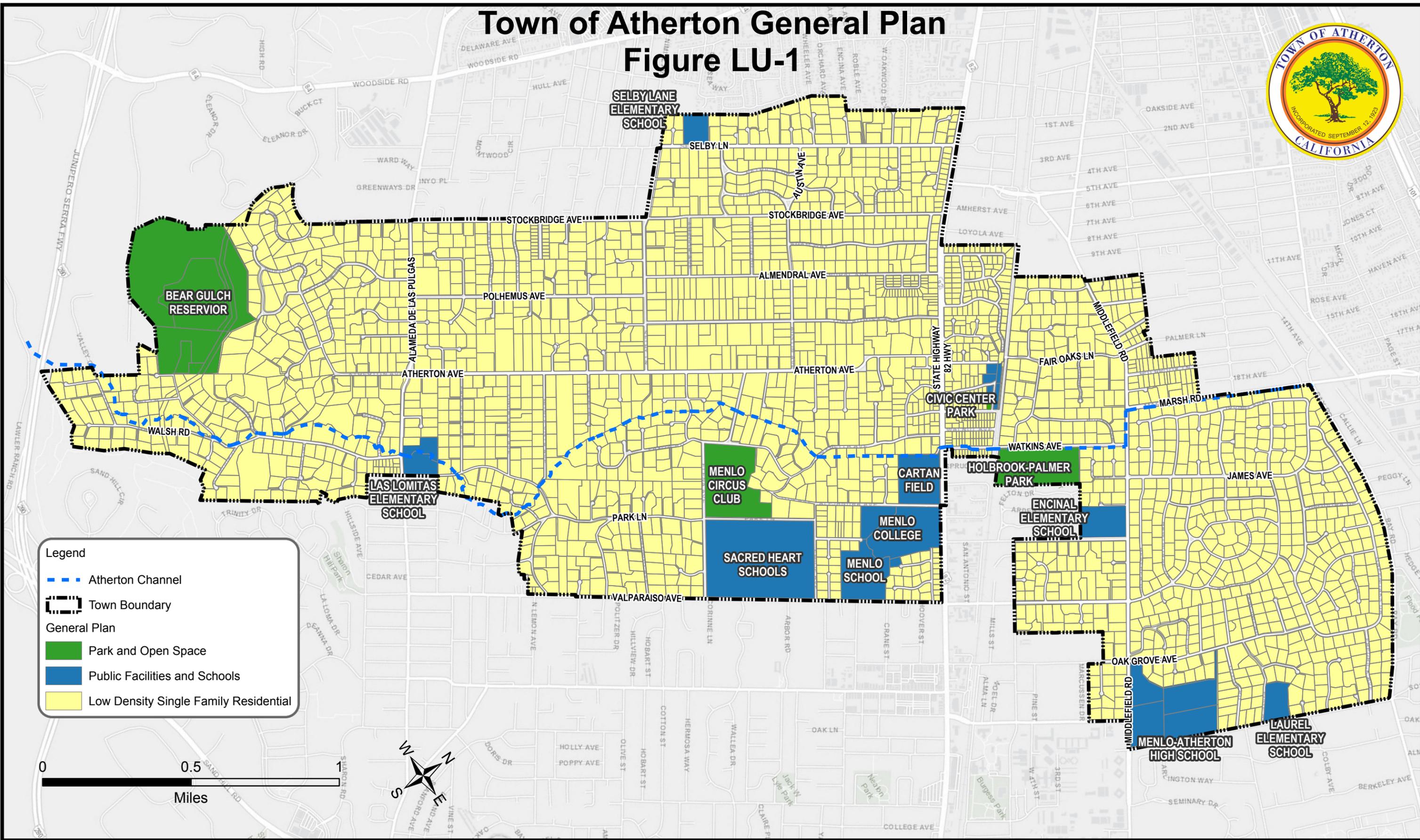
⁷ Source: CD+A

Goal LU-3:	Assure development of private schools continue to reflect the Town's character as a scenic, semi-rural, thickly-wooded residential area.
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Policy LU-3.1: Request private schools prepare Master Development Plans that are reviewed annually by the Planning Commission.

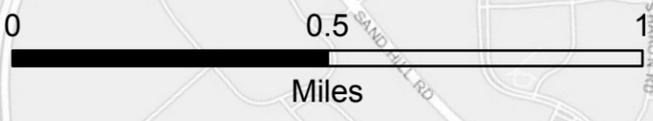
Town of Atherton General Plan

Figure LU-1



Legend

- Atherton Channel
- Town Boundary
- General Plan**
- Park and Open Space
- Public Facilities and Schools
- Low Density Single Family Residential



CIRCULATION ELEMENT

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CIRCULATION ELEMENT

I. Purpose and Relation to Other Elements

The Circulation Element describes facilities and policies for the movement of people and goods throughout the Town. It includes a plan of roadways, in addition to facilities for pedestrian, bicycle and rail transportation. The Element plans for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, highways and rail for safe and convenient travel in a manner that is suitable to the semi-rural context of the General Plan. Users include motorists, pedestrians, bicyclists, children, persons with disabilities, movers of commercial goods, users of public transportation, and seniors. Since the Town policy seeks to preserve all streets and highways as scenic routes, this Element shall also serve as the Scenic Roadways Element of the General Plan.

The Circulation Element is most closely related to the Land Use and Housing Elements. It is particularly essential that the Circulation Element reflects and reinforces the goals and objectives set forth in the Land Use Element. Specifically, roadways and other transportation facilities must be planned and designed under the overriding principle of maintaining the Town's rural character.

II. Background Information

Major Thoroughfares and the Regional Transportation System

Atherton's circulation system has been developed within the context of the Bay Area's regional and the Peninsula's sub-regional major thoroughfare and transportation system. A system of freeways and state highways provides access to and from the Town for motorists, movers of commercial goods, cyclists, and users of public transportation. The nearby freeways of US 101 (Bayshore Freeway) and I-280 (Junipero Serra Freeway), as well as the State Highways of El Camino Real (SR 82, also known as the Grand Boulevard) and Woodside Road/Marsh Road (SR 84) provide major roadway access to Atherton. The CalTrain rail facilities provide commuter train access between San Francisco and the Santa Clara Valley as well as a thoroughfare for rail freight shipments. See "Rail Transportation" Section below for additional detail. The San Mateo County Transit District (SamTrans) provides bus service throughout San Mateo County and into portions of San Francisco and Palo Alto. The District also provides commuter shuttle services and paratransit operations. See "Bus Transportation" section below for additional detail.

Plan Bay Area 2040 is a state-mandated regional plan that aims to integrate sustainable strategies to reduce transportation-related pollution and greenhouse gas emission within the nine-counties of the San Francisco Bay Area. The plan implements a State law known as the Sustainable Communities and Climate Protection Act of 2008. The plan addresses methods of transportation, land-use, and housing. Over the next 25 years, the Bay Area is expected to grow by an estimated 2 million people and because of the projected growth and the growing economy, the Bay Area needs to provide more housing and transportation choices. The plan was adopted in July 2013 by ABAG and MTC. Development of Plan Bay Area 2040 included extensive updating of research, forecasts and investment priorities from the previous regional transportation plan, known as Transportation 2035, which was adopted in 2009. As the title

implies, Transportation 2035 detailed a long-range regional transportation strategy covering the years 2010 through 2035.

Congestion Management

The City/County Association of Governments of San Mateo County (C/CAG), as the Congestion Management Agency for San Mateo County, is required by State law to prepare and adopt a **Congestion Management Program (CMP)** on a biennial basis. The purpose of the CMP is to identify strategies to respond to future transportation needs, develop procedures to alleviate and control congestion, and promote countywide solutions. The CMP is required to be consistent with the Metropolitan Transportation Commission (MTC) planning process that includes regional goals, policies, and projects for the Regional Transportation Improvement Program (RTIP). The most current San Mateo County CMP was adopted in February 2018. It includes a roadway system consisting of freeways, state highways and principal arterials that form the basic structure of the County's vehicle transportation system. In Atherton, El Camino Real (SR 82) is the only street included in the CMP roadway system. The CMP designates 16 major intersections throughout the County to have their level of service monitored; however, none of those are within Atherton. Level of Service (LOS) Standards for segments of the CMP roadway system for future operations were established in the initial years of the program (1990/91). The LOS Standard for the El Camino Real segment through Atherton (i.e. SR 84 to Glenwood Avenue) was established at LOS E. In 2017, that segment was operating at LOS B in the AM peak hour and LOS C in the PM peak hour.

The CMP also includes a Performance Element, with measures to evaluate current and future multimodal system performance for the movement of people and goods; a Trip Reduction and Travel Demand Element, designed to promote alternative transportation methods (carpools, vanpools, transit, bicycles, park-and-ride lots, etc.), improve the balance between jobs and housing, and promote other strategies to reduce traffic congestion such as flexible work hours, telecommuting, parking management programs and, possibly parking cash-out programs; a Land Use Impact Analysis Program to determine the impacts of land use decisions upon regional transportation routes and air quality; and Deficiency Plan Guidelines as a way for the cities and the County to remain in conformance with the CMP when the LOS for a CMP roadway segment or intersection deteriorates below the established standard. A five-year Capital Improvement Program is also included in the CMP.

Grand Boulevard Initiative

The **Grand Boulevard Initiative** is a collaboration of 19 cities, counties, local and regional agencies united to improve the performance, safety and aesthetics of El Camino Real, and the principles of which was supported by the Town beginning in 2008. Starting at the northern Daly City city limit (where it is named Mission Street) and ending near the Diridon Caltrain Station in central San Jose (where it is named The Alameda), the initiative brings together for the first time all of the agencies having responsibility for the condition, use and performance of the street under the jurisdictional umbrella of CalTrans (SR 82 is a State Highway).¹

¹ Source: DPW

The **Grand Boulevard Greenway Concept** through Atherton is described in more detail in the Land Use Element of this General Plan and in the adopted Bike/Pedestrian Master Plan. The concept is to consider dedicated bicycle and pedestrian facilities, and transit access improvements, along the length of El Camino Real within Atherton by repurposing a vehicle travel lane in one or both directions, where feasible. Further study is required prior to project implementation.

Complete Streets

In 2008, the California Legislature adopted the **California Complete Streets Act** which requires cities and counties at such time as they substantially amend the circulation element of their general plans, to include plans for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan. Users of streets, roads, and highways means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

The Atherton City Council adopted² a Complete Streets Policies. Complete Streets are streets and facilities that accommodate all users including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors. The policies adopted include a commitment, where feasible, to creating and maintaining Complete Streets serving all users, to maintaining a context of sensitivity to a strong sense of place and preservation of the Town's semi-rural character, to assure that Complete Streets are routinely addressed by all Town departments, and to consider incorporating Complete Streets infrastructure in all projects and phases. A Complete Streets policy is included in the Goals, Objectives, Policies and Actions section of this element.

A recent project that incorporated the Complete Streets concept includes the reconstruction of the Oak Grove Avenue/Middlefield Road intersection.

Bicycle/Pedestrian Master Plan

The Town's adopted³ **Bicycle and Pedestrian Master Plan** puts forward visionary yet practical recommendations for improving travel safety and encouraging greater use of active, low-impact travel modes. The Plan builds off and contributes to the region's bicycle priorities and local Safe Routes to School efforts and includes a detailed walkability assessment for 33 miles of Atherton roadways. It provides context-sensitive policy and design recommendations to retain and enhance the Town's scenic character while improving the ease at which all ages and abilities can safely walk or bicycle to key destinations.

The Town of Atherton currently utilizes Caltrans' bikeway design standards, which are organized according to a classification system within the California Highway Design Manual (HDM) defined as 'Class I' off-street trails; 'Class II' on-street, dedicated bike lanes; 'Class III' shared bikeways; and 'Class IV' separated bikeways.⁴

² Resolution No. 12-33, adopted November 28, 2012

³ Adopted May 20, 2015

⁴ Source: CD+A

The Atherton Bicycle and Pedestrian Master Plan identifies four key project corridors/categories to improve active transportation safety and options. These facility recommendations consist of:

1. A major overhaul to El Camino Real by (in most cases) converting the westernmost southbound travel lane to a Class I trail with landscaping, potential green infrastructure⁵ and pedestrian crossing improvements, called the Grand Boulevard Greenway, where may be feasible and appropriate.
2. A new east-west Bay-to-Ridge Greenway, including Class I trail and pathway improvements to Marsh Road/Middlefield Road/Watkins Ave, plus bicycle boulevard and greenway linkages along or adjacent to the Atherton Channel across El Camino Real to Alameda de las Pulgas.
3. Safe Routes to School: Enhanced bike lanes along the regionally important Middlefield Road, Valparaiso Avenue, and Alameda de las Pulgas corridors, as well as new bike lanes and pedestrian improvements on Selby Lane, Glenwood Ave, and Atherton Ave serving local priority connections.
4. Shared bikeway and pedestrian greenway improvements along the Countywide North/South Bicycle Boulevard (along Elena Ave and Austin Ave/Selby Lane), as well as additional shared bikeway improvements connecting to the Town Center.

Safe Routes to School Program

Safe Routes to School is an idea that has been implemented through State and Federal legislation. The concept is to increase the number of children who walk or bicycle to school by funding projects that remove the barriers that currently prevent them from doing so. Those barriers include lack of infrastructure, unsafe infrastructure, and lack of programs that promote walking and bicycling through education/encouragement programs aimed at children, parents, and the community.

Atherton supports the Safe Routes to School concept and has implemented several projects planned and designed to achieve the program's goals. The Bicycle and Pedestrian Master Plan Project list includes several projects that would increase safety, remove barriers and enhance accessibility to children who walk or bicycle to school.

Green Streets

Green streets are a companion concept to **Green Infrastructure** described in the Open Space and Conservation Element. Green streets are streets that include a stormwater management and treatment approach that may incorporate vegetation (e.g., perennials, shrubs, trees), soil, and engineered systems (e.g., permeable pavements, infiltration trenches) to slow, filter, and cleanse stormwater runoff from impervious surfaces (e.g., streets, sidewalks). Green streets are designed to capture rainwater at its source, where rain falls. Whereas, a traditional street is designed to direct stormwater runoff from impervious surfaces into storm sewer systems (gutters, drains, pipes) that discharge directly into surface waters, rivers, and streams.

Green streets are one technique for the Town to meet its water quality goals established by the MRP and its Green Infrastructure Plan and should be considered during street and other improvement projects.

⁵ Source: CD+A

The Green Infrastructure Plan identifies priority green street projects based on the San Mateo Stormwater Resource Plan. Additional green street opportunities may exist with other street improvement projects such as Safe Routes to School and those identified in the Bicycle and Pedestrian Master Plan.⁶

Neighborhood Traffic Management Program

The Atherton **Neighborhood Traffic Management Program** (NTMP) is City Council adopted⁷ policy document which provides a comprehensive, thoughtful, and systematic program to address neighborhood traffic concerns, improve pedestrian and bicycle safety, and maintain the scenic and quiet rural character of Atherton neighborhoods. It is a community-based approach to reduce vehicle speeds and improve the behaviors of drivers to “calm” traffic in residential neighborhoods.

Town staff has the authority to implement various⁸ traffic control measures. The NTMP does not affect staff authority to implement necessary traffic control measures in residential neighborhoods in response to observed traffic safety concerns. The NTMP is an additional tool which provides a systematic framework to educate and encourage residents to participate in identifying and implementing equitable and effective neighborhood traffic solutions.

The process involves steps to identify the residents’ traffic concern(s), demonstrate neighborhood support for traffic calming measure(s), to determine if the traffic concerns meet the NTMP qualifying criteria, to identify (by Town staff) the most appropriate and effective improvement measure(s), and to prioritize and implement the plan.

Transportation Demand Management

Transportation Demand Management (TDM) programs are intended to reduce vehicle trips and parking demand by promoting the use of a variety of transportation options and shifting travel mode and time of day to take advantage of available facility capacity to reduce crowding and congestion. By implementing TDM programs, municipalities and private entities can use available transportation resources more efficiently. TDM programs encourage use of carpools, vanpools, buses, public transportation and alternative transportation modes (bikes, walking) as a means of reducing single occupant vehicle trips. In Atherton, Menlo School and Sacred Heart Schools have successfully used TDM programs to substantially reduce peak hour traffic accessing their facilities.

The Town supports the C/CAG Congestion Management Program vehicle trip reduction measures for projects generating a net 100 or more peak-period trips in the Congestion Management Program network. The Town encourages other employers in Town, such as public and private schools, to incorporate TDM programs in their operations.

During the Planning Commission annual review of private school master plans, traffic congestion and flow issues should be evaluated and addressed to assure that impacts on the circulation system are not excessive.

⁶ Source: CD+A

⁷ Adopted July 20, 2016

⁸ Source: CD+A

Rail Transportation

Peninsula commuter rail service originated in 1863 with construction of a single-track railroad between San Francisco and San Jose by the San Francisco and San Jose Railroad. The facilities were purchased by the Southern Pacific Company in 1870 and a second track was constructed in 1904. Atherton was one of the earliest train stops on the rail corridor. Families, and later commuters, used the Atherton station for rail service to and from “The City” for over 100 years. Lloyd Park was developed for residents desiring easy access to public transportation provided by the train.

In 1988 the Santa Clara Valley Transportation Authority, the City and County of San Francisco, and the San Mateo County Transit District entered into a joint powers agreement creating the Peninsula Corridor Study Joint Powers Board (JPB) for the purposes of conducting planning studies related to the Peninsula Commute Service. The JPB bought the railroad right of way between San Francisco and San Jose from Southern Pacific in 1991. The JPB currently manages the operation of the Caltrain commute service by a private contractor.

In 2005 the JPB suspended weekday commute service at the Atherton Train Station as one measure in a multi-faceted cost-cutting effort. Weekend service at the Atherton Station continues. The Town will continue to support rail efforts and services determined to be appropriate for the community, while preserving the single-family character of the Town.

Caltrain plans to “modernize” and electrify the main line between San Francisco and San Jose; replacing the diesel-electric locomotive power with fully electric rolling stock by 2022. Construction began on that project mid-2017.

High-Speed Rail (HSR) is a project undertaken by the State of California with the objective of constructing and operating a HSR service between Los Angeles and San Francisco/Sacramento. The plan includes using the Peninsula Commute Corridor for HSR operation from San Jose to San Francisco, and possibly the addition of one or more new tracks through Atherton to accommodate HSR. The Town of Atherton has opposed the HSR Project because of its reliance on faulty data, high costs, adverse environmental effects, and impacts to the Peninsula Commute corridor. In early 2019 the California Governor reduced the scope of the HSR project, suspending the Peninsula corridor route, among other major changes.⁹

There are two at-grade road crossings of the Caltrain tracks in Atherton; one at Fair Oaks Lane and the other at Watkins Avenue. The crossing at Fair Oaks Lane is protected by a four-quadrant gate or “quad-gate”; a mechanism on both sides of the tracks that blocks automotive traffic from both directions. This is a safety device that qualifies the crossing for quiet zone status where the train horn is not sounded before the crossing, except in emergencies. The Town seeks to have the Watkins Avenue crossing improved with additional safety measures, such as quad-gates, to improve safety at the crossing and to also allow¹⁰ for quiet zone status.

Bus Transportation

The San Mateo County Transit District (SamTrans) operates fixed bus routes through Atherton, providing public bus access throughout San Mateo County and into San Francisco and Palo Alto. The principal line

⁹ Source: Planning Dept.

¹⁰ Source: DPW

runs along El Camino Real, providing connecting service to Peninsula transit stations between Palo Alto and Daly City. Other lines run on Middlefield Road and Bay Road. Service is available to local elementary and high schools on schooldays.

SamTrans also operates the Menlo Park Caltrain Shuttle which provides service through Atherton between the Menlo Park Caltrain Station and the Bohannon Industrial Park east of Atherton.

Emergency Operations Plan and Evacuation Routes

As described in the Community Safety Element, the Town of Atherton Police Department and the Menlo Park Fire Protection District have jointly prepared the Town of Atherton Emergency Operations Plan (EOP) which describes how the jurisdictions will manage and coordinate resources and personnel responding to emergency situations. The EOP, along with a companion document; the Atherton Hazard Mitigation Strategies (HMS), is the Town’s Local Hazard Mitigation Plan specified in the federal Disaster Mitigation Act of 2000 (P.L. 106-390).

The Town’s circulation system plays a key role in emergency operations, providing access to properties and individuals as well as functioning evacuation infrastructure and routes during emergencies. Primary emergency evacuation routes are shown on the Community Safety Diagram and are listed in a Circulation Element policy in Section IV of this element.

Scenic Roadways

Scenic roads are an important resource to San Mateo County and to Atherton for both aesthetic and recreational purposes. Scenic corridors can best be defined as the visual land area outside the road right-of-way and generally described as the “view from the road”. It is within this area that development standards are applied to retain and enhance scenic qualities and restrict unsightly use of the land. These standards may include regulations on building setbacks, signs, grading, tree removal, landscaping and underground utility lines. The Junipero Serra Freeway (Interstate 280) is the only roadway located in the vicinity of Atherton which has been designated as a scenic highway pursuant to the provisions of Section 260 et seq. of the California Streets and Highways Code. However, it is Town policy to designate all streets and highways within Town as scenic routes.

Climate Action Plan

Atherton’s proposals and policies related to climate change are contained in its adopted¹¹ **Climate Action Plan**. The Town’s Climate Action Plan (CAP) serves as a guiding document to identify methods that the Town and community can implement to significantly reduce greenhouse gas (GHG) emissions. The Plan provides a comprehensive roadmap of programs that can be implemented to reduce emissions and increase sustainability. Transportation aspects of the CAP, as amended from time to time, are addressed in the Circulation Element. Energy, water and solid waste programs and policies are addressed in the Open Space and Conservation Element.

Atherton has adopted a target of reducing emission to 15 percent below 2005 levels by 2020 and 49 percent below 2005 levels by 2030.

¹¹ Adopted October 19, 2016

In Atherton, approximately 44% percent of GHG emissions stem from transportation. Travel on local roads and state highways represent 80% and 20% of on-road transportation emissions respectively. Thus, reducing transportation emissions is a critical component of the climate action strategy. Reducing emissions from the transportation sector requires addressing three constituent components: reducing the carbon intensity of fuels, increasing vehicle efficiency, and reducing vehicle miles travelled (VMT). The Town is committed to providing transportation options that are convenient, safe, and affordable.

Local Traffic Flow/Long Range Planning Solutions Study

The Town recently embarked on a study focusing on the Town’s roadway network with the objective of developing short- and longer-term solutions and strategies for mitigating current cut through and speeding traffic which the majority of which originates outside of the Town limits¹². The study included collection of background data related to traffic, pedestrian and bicycle volume counts and projections, signal timing and phasing, origin-destination studies, speed studies, future land use projects, and other similar data.

Traffic Counts Program

The Atherton Department of Public Works has a program where vehicular traffic is counted from time to time¹³ on minor arterial, collector and selected local streets. The count data is available to determine current roadway usage and volume growth trends. The data is posted on the Town website.

III. Roads and the Local Street Classification System

Roadways in the Town of Atherton may be divided into four classifications; highways, minor arterial streets, collector streets, and local streets. While the vast majority of Atherton’s roadways fall into the last category, each of these four categories is represented by at least one road.

Freeways & Highways: Freeways and Highways are multi-lane facilities with no fixed interruptions to traffic flow. The Town of Atherton contains no freeways; however, the Junipero Serra Freeway (Interstate 280) abuts the western edge of the incorporated Town limits. The single highway through the Town is El Camino Real (State Route 82) which provides for through traffic. El Camino Real has also been described as the “Grand Boulevard” (see section entitled “Grand Boulevard Initiative” above).

Minor Arterials: Minor Arterials are streets with traffic signals that primarily serve through traffic and provide access to abutting properties as a secondary function. The main role of minor arterial streets is to link residential districts to other transportation facilities and to act as emergency service and evacuation routes.

Collector Streets: These are streets that provide both land access and traffic circulation service within residential areas. Unlike minor arterials, their operation is not always dominated by traffic signals. While not as important as minor arterials, collector streets should still be designed to carry through traffic. Their function is to transfer traffic from local traffic generators (homes, schools, etc.) and local streets to minor arterials and arterials.

¹² Source: Draft Local Traffic Flow/Long Range Planning Solutions Study

¹³ Source: DPW

Local Streets: There are streets that, aside from the roadways cited above, are the remainder of Atherton’s classified roads. Such roads are used to provide access to abutting property, locations for easements, open space for light and air and a fire break between buildings. Carrying traffic is a secondary function of local streets and they should be designed to discourage through traffic.

Table C-1 below lists Atherton’s major streets and their classification by road type.

Table C-1: Major Streets Classified by Road Type

Street	Road Type	From	To
El Camino Real	Highway	City Limits	City Limits
Alameda de las Pulgas	Minor Arterial	City Limits	City Limits
Marsh Road	Minor Arterial	Middlefield Road	City Limits
Middlefield Road	Minor Arterial	City Limits	City Limits
Ravenswood Avenue¹⁴	Minor Arterial	City Limits	Middlefield
Valparaiso Avenue¹⁵	Minor Arterial	City Limits	El Camino Real
Atherton Avenue	Collector	Ridgeview Drive	El Camino Real
Encinal Avenue	Collector	City Limits	Middlefield Road
Fair Oaks Lane	Collector	El Camino Real	Middlefield Road
Glenwood Avenue	Collector	City Limits	Middlefield

¹⁴ Proposed change from Collector to Minor Arterial because it is designated as a Minor Arterial in the City of Menlo Park General Plan, Circulation Element and has an average daily traffic volume of 16,600 vpd or more.

¹⁵ Proposed change from Collector to Minor Arterial because it is designated as a Minor Arterial in the City of Menlo Park General Plan, Circulation Element and has an average daily traffic volume of 12,900 – 13,200 vpd.

Oak Grove Avenue	Collector	City Limits	Middlefield
Ringwood Avenue	Collector	Middlefield Road	Bay Road
Watkins Avenue	Collector	El Camino Real	Middlefield Road

Street Standards

The general standards for street right-of-way and improvements are listed in Table C-2 below. Local conditions may necessitate modification of these standards where topography, building location or other conditions warrant. Detailed standards for street improvements are set forth in the Atherton Municipal Code and in this Circulation Element.

Table C-2: Street Standards

Street Category	Recommended Pavement Width	Right-of-Way Width
Minor Arterial	32 feet ¹⁶	60 feet
Collector	24 feet	50 feet
Local	20 feet	40 feet
Cul-de-Sac	18 feet	30 feet

Level of Service

Transportation engineers and planners commonly use a grading system called **Level of Service (LOS)** to measure and describe the operational status of the local roadway network. LOS is a description of the quality of a roadway facility’s operation, ranging from LOS A (indicating free flow traffic conditions with little or no delay) to LOS F (representing oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). Intersections, rather than roadway segments between intersections, are almost always the capacity controlling locations for any circulation system.

¹⁶ Source: Transportation Committee

Separate standardized LOS criteria have been developed for signalized and unsignalized intersections. The criteria are presented in Tables C-3 and C-4 below.

Table C-3: Signalized Intersection LOS Criteria¹⁷

Level of Service	Description	Average Control Delay (Seconds Per Vehicle)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and/or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	> 80.0

¹⁷ Source: Transportation Research Board, 2000 Highway Capacity Manual.

Table C-4: Unsignalized Intersection LOS Criteria¹⁸

Level of Service	Description	Average Control Delay (Seconds Per Vehicle)
A	Little or no delays	≤ 10.0
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded (for an all-stop), or with approach/turn movement capacity exceeded (for a side street stop-controlled intersection)	> 50.0

Atherton’s minimum acceptable intersection level of service standards are listed below.

- Highways: LOS E (C/CAG adopted standard)
- Minor Arterials and Collectors: LOS D
- Local Streets: LOS C

LOS Thresholds of Significance under CEQA

Proposed projects are required by the California Environmental Quality Act (CEQA), to be evaluated to determine if they conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Such projects may be located either in Town or in another jurisdiction where the project could have an impact on Town intersections. The minimum acceptable intersection level of service standards listed above are the Town’s performance policy for the circulation system. The criteria for determining if a proposed project would create a significant adverse impact on Town intersections are described below.

A project is considered to have a potentially “significant” traffic impact if the addition of project traffic causes:

¹⁸ Source: Transportation Research Board, 2000 Highway Capacity Manual.

- Threshold “I” – An intersection on **minor arterial streets** or **local approaches to State-controlled signalized intersections** operating at LOS A through D to operate at an unacceptable level (LOS E or F) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.
- Threshold “II” - An increase of more than 4 seconds to average delay to vehicles on all critical movements for intersections on **minor arterial streets** operating at LOS E or F.
- Threshold “III” - An increase of more than 4 seconds to average delay to vehicles on the most critical movements for intersections on **local approaches to State-controlled intersections** operating at LOS E or F.
- Threshold “IV” - An intersection on **collector streets** operating at LOS A through C to operate at an unacceptable level (LOS D, E or F) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.
- Threshold “V” - An increase of more than 4 seconds to average delay to vehicles on all critical movements for intersections on **collector streets** operating at LOS D, E or F.

Vehicle Miles Traveled

Another grading system called **vehicle miles traveled (VMT)** has been less commonly used to measure and describe the operational status of the local roadway network. While it is desirable to reduce vehicle miles traveled to help relieve congestion and improve air quality, there are currently no universally accepted VMT standards or thresholds of significance similar to the LOS standards.

Circulation Element Diagram and Bicycle/Pedestrian Master Plan Diagram

Figure C-1 below is the Circulation Element Diagram and Figure C-2 below is the adopted Bicycle/Pedestrian Master Plan Diagram.

IV. Goals, Objectives, Policies and Actions

Goal CIR-1:	To develop a circulation system that is compatible with the needs of various land uses planned within the Town of Atherton.
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Objective CIR-1.1: To minimize the encroachment of the circulation network on the residential and open spaces uses which prevail throughout most of the community.

Policy CIR-1.1: No street under the jurisdiction of the Town shall be more than two lanes in width (excluding turn lanes and bike lanes).

Policy CIR-1.2: No new vertical curbs or sidewalks shall be constructed, as their presence would be incongruent with existing development.

Policy CIR-1.3: Where possible within the constraints of other policies, promote the use of and implement¹⁹ Green Streets techniques and practices in order to reduce flooding, treat stormwater at its source, and to reduce stormwater pollution.

Policy CIR-1.4: Meandering street lines shall be preserved consistent with traffic safety.

Policy CIR-1.5: A public street shall be accepted by the Town only on the condition that it has been improved in accordance with Town standards existing at the time of acceptance.

Policy CIR-1.6: Use of Town streets as thoroughfares by trucks and other large vehicles shall be carefully controlled.

Policy CIR-1.7: Paving for temporary on-street parking within the roadway right-of-way will be prohibited.

Policy CIR-1.8: Valley gutters or rolled curbs may be required in all new subdivisions.

Objective CIR-1.2: To preserve the streets of Atherton as scenic routes.

Policy CIR-1.9: All streets and highways in the Town of Atherton shall be preserved as scenic routes.

Policy CIR-1.10: The development of arterial streets and/or highways through the Town shall be prevented to minimize disruption of its scenic features.

Policy CIR-1.11: The intrusion of El Camino Real on the ecology of the Town shall be minimized to the greatest extent possible by:

- A. Preserving center planting on El Camino Real;
- B. Minimizing the number of lots with access onto El Camino Real;

¹⁹ Source: CD+A

C. Promoting the maintenance of walls, green infrastructure²⁰, shrubbery and trees along the sides of El Camino Real.

Policy CIR-1.12: For reasons discussed above the Town also seeks to minimize the number of lots with access onto Alameda de las Pulgas and Middlefield Road.

Policy CIR-1.13: On-street and visible off-street parking of vehicles and other means of transportation shall be carefully controlled.

Policy CIR-1.14: Street lights and signs shall be kept to a minimum.

Policy CIR-1.15: Trees located in the right-of-way shall be preserved to the extent consistent with traffic safety.

Policy CIR-1.16: The emergency evacuation routes established in this General Plan Element are El Camino Real, Middlefield Road, Marsh Road, Alameda de las Pulgas, Stockbridge Avenue, Atherton Avenue/Fair Oaks Lane, Valparaiso Avenue, Glenwood Avenue, Encinal Avenue, Watkins Avenue and Ringwood Avenue.

Goal CIR-2:	To reduce congestion on freeways, state highways and principal arterials by participation with and support for the congestion management programs of C/CAG.
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Goal CIR-3:	To consider participation in the Grand Boulevard Initiative and support its efforts to improve the performance, safety and aesthetics of El Camino Real where consistent with other Atherton goals, objectives and policies.
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Goal CIR-4:	To achieve a balanced, multimodal transportation network that meets the needs of all users of Atherton streets and highways for safe and convenient travel in a manner that is suitable to the semi-rural context of the general plan.
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Objective CIR-4.1: To incorporate, over time and where feasible, the principles of Complete Streets in future roadway projects. Complete Streets are streets and facilities that accommodate all users including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

Policy CIR-4.2: Bicycle paths separating bicycles from vehicular traffic are considered desirable.

Goal CIR-5:	To achieve a high quality of roadway operation on all Atherton streets.
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²⁰ Source: CD+A

Policy CIR-5.1: Atherton’s minimum acceptable intersection level of service standards are listed below.

- Highways: LOS E (C/CAG adopted standard)
- Minor Arterials and Collectors: LOS D
- Local Streets: LOS C

Policy CIR-5.2: Limit cut-through and pass through²¹ traffic on local streets by supporting Towns’ efforts using the Neighborhood Traffic Management Program described in this Element.

Policy CIR-5.3: During the annual review of private school master plans, the Planning Commission should evaluate and address traffic congestion and flow issues to assure that impacts on the circulation system are not excessive.

Policy CIR-5.4: The Town shall support identified short-term and long-term strategies and physical improvements addressing traffic concerns originating both outside and within the Town boundaries in order to improve circulation, smooth progression, improved operations, mobility and safety for all modes of transportation, as feasible.

Policy CIR-5.5: The Town seeks to minimize, to the greatest extent possible, the environmental impact of transit and rail facilities on the semi-rural and open space features of the community.

Policy CIR-5.6: The Town shall support the continued operation and upgrading of passenger rail service operated over the Joint Powers Board right-of-way between Gilroy and San Francisco.

Policy CIR-5.7: The Town desires to limit public bus service to minor arterials and State Highways.

Goal CIR-6:	To halt the eventual use of the Peninsula Corridor by High Speed Rail. ²²
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Objective CIR-6.1: Implementation of a Quiet Zone within and on the Town’s border areas.

Objective CIR-6.2: The Town will continue to support rail efforts and services determined to be appropriate for the community, while preserving the single-family character of the Town.

Goal CIR-7:	Support the goals, policies and programs embodied in the adopted Atherton Climate Action Plan.
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²¹ Source: DPW

²² The Goals, Objectives and Policies related to High Speed Rail are taken from City Council Resolution No. 13-08 adopted June 14, 2013.



Bicycle/Pedestrian Master Plan Diagram

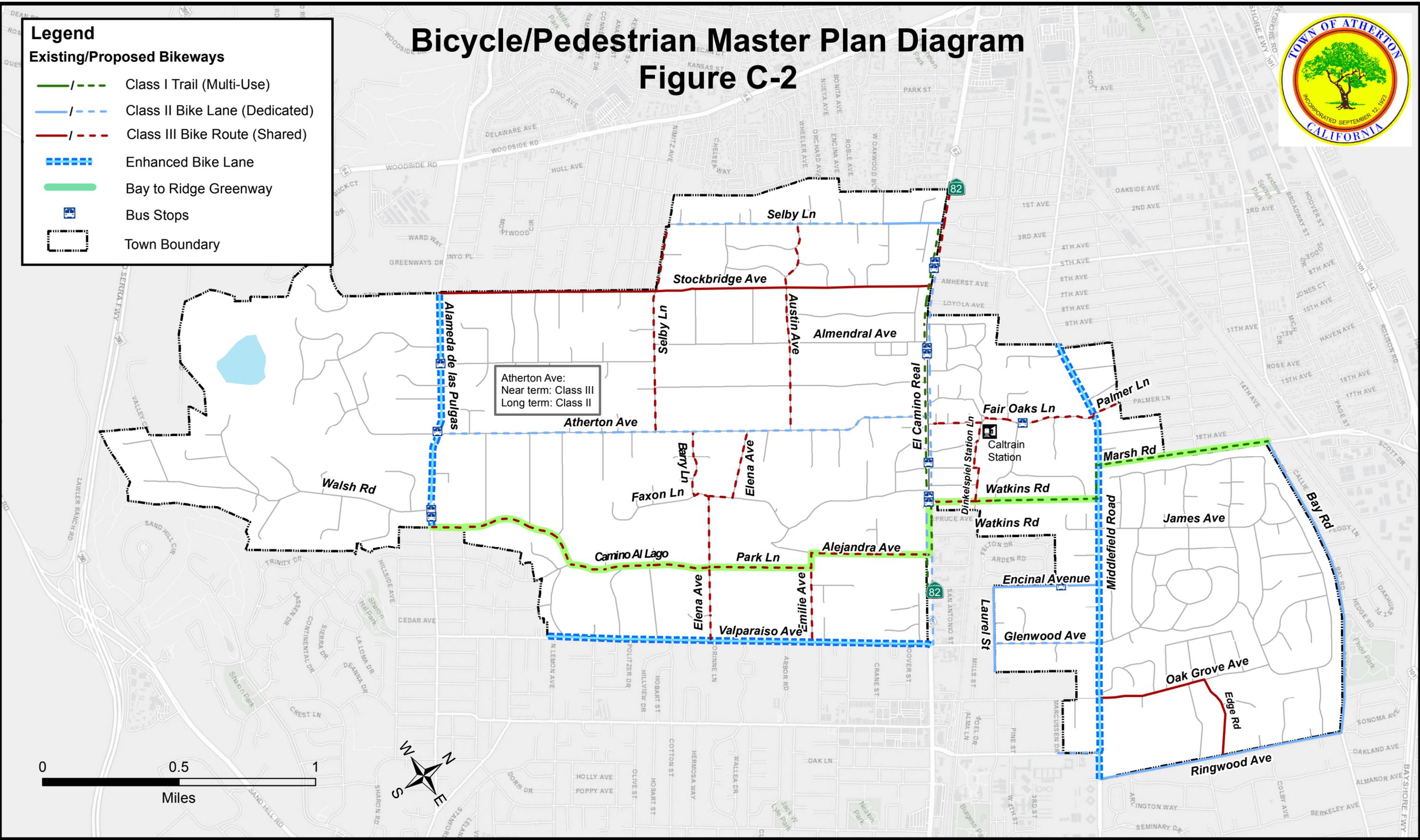
Figure C-2

Legend

Existing/Proposed Bikeways

- Class I Trail (Multi-Use)
- Class II Bike Lane (Dedicated)
- Class III Bike Route (Shared)
- Enhanced Bike Lane
- Bay to Ridge Greenway
- Bus Stops
- Town Boundary

Atherton Ave:
Near term: Class III
Long term: Class II



NOISE ELEMENT

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NOISE ELEMENT

I. Purpose, Relation to Other Elements and Noise Fundamentals

The Noise Element seeks to describe the present and future noise environment in Atherton in an effort to prevent intrusion by harmful and annoying sound levels. Major noise sources are identified, the effects of noise on the community are discussed, and strategies for minimizing unwanted noise are outlined.

The Noise Element is closely related to the Land Use and Circulation Element as decisions implemented under policies contained in those Elements have an effect on the noise environment.

Noise is defined as “unwanted sound” and can be viewed as an adverse environmental impact. Its intensity depends on its effect on the listener. Noise levels are measured on a logarithmic scale in decibels. In environmental noise, a change in noise level of 3 dB is considered a just noticeable difference. A 5 dB change is clearly noticeable, but not dramatic. A 10 dB change is perceived as a halving or doubling in loudness.¹ Table N-1 illustrates a variety of commonly encountered noises as measured in decibels.

II. Background Information

Noise Environment in Atherton

Existing Noise Environment

Community noise levels vary continuously; therefore, all of the individual noise readings must be averaged over a 24-hour period to give an equivalent level. This equivalent noise level, expressed as Ldn (Day-Night Average Level), has been estimated based on traffic counts and train schedules, as well as field measurements, using a sound level meter. The resulting noise contours have been plotted on Figure N-1 to illustrate areas of significant noise exposure in the Town.

The existing noise environment in Atherton is relatively quiet. L₉₀ measurements² range from 40 – 57 dBA during a typical weekday afternoon at various locations throughout Town. Figure N-1 illustrates that the major contributors to the noise environment in Atherton are transportation sources. Lands surrounding El Camino Real and the Caltrain Railroad right-of-way are the primary areas where noise levels reach the 60 to 70 decibel range. Traffic on Interstate 280 and US 101 contribute to community noise levels. Flights from and to San Francisco International, San Carlos and Palo Alto Airports are noticeable in Atherton, however the noise contours for these airports do not extend into the town limits. Overall, however, no Atherton residents should be subject to prolonged, unacceptable noise levels. This is a critical factor in maintaining the Town’s desirability as a residential community.

¹ RGD Acoustics, *Assistance with the General Plan Noise Element Update, Draft Report*, 5 October 2018

² The background noise level (residual noise level or ambient level) is the sound level during the quietest moments. It can be quantified with a descriptor called the L₉₀ which is the sound level exceeded 90 percent of the time.

Table N-1 shows typical noise meter readings for various sound sources that may occur in the environment. The purpose of this table is to provide a frame of reference for different sounds that might occur. Actual readings may be higher or lower than those shown in the table. These are not intended to be regulatory nor are they maximums that could be included in a noise ordinance but simply as a reference point.

Table N-1: Typical Sound Levels in Decibels

Sound Source	Sound Pressure Level (dBA)
Air raid siren at 50 ft (threshold of pain)⁽¹⁾	120
Maximum levels in audience at rock concerts⁽¹⁾	110
Train horn at 100 ft⁽³⁾	103
On platform by passing subway train⁽¹⁾	100
High-speed electric train traveling at 220 mph at 100 ft⁽³⁾	97
On sidewalk by passing heavy truck or bus⁽¹⁾	90
Commuter train traveling at 79 mph at 100 ft⁽³⁾	88
High-speed electric train traveling at 125 mph at 100 ft⁽³⁾	83
On sidewalk by passing automobiles with mufflers⁽¹⁾	70
Typical gas and electric powered leaf blower at 50 ft⁽²⁾	68 - 71
Low noise gas powered leaf blower at 50 ft⁽²⁾	65
Typical urban area background/busy office⁽¹⁾	60
Typical suburban area background⁽¹⁾	50
Quiet suburban area at night⁽¹⁾	40
Typical rural area at night⁽¹⁾	30
Isolated broadcast studio⁽¹⁾	20
Audiometric (hearing testing) booth⁽¹⁾	10
Threshold of hearing without hearing damage⁽¹⁾	0

References for table N-1:

1. James P. Cowan, Handbook of Environmental Acoustics, 1994.
2. California Environmental Protection Agency, Air Resources Board. Mobile Source Control Division (2000). A report to the California legislature on the potential health and environmental impacts of leaf blowers. Retrieved from <https://ww3.arb.ca.gov/msprog/leafblow/leafblow.html>.
3. California High-Speed Rail Authority. (2018). How do High-Speed Train Noise Levels Compare to Traditional Trains. Retrieved from https://www.hsr.ca.gov/communication/info_center/factsheets.aspx.

Atherton is generally a quiet, primarily residential community. However, there are several noise generators that could impact Town residents, including vehicular and aircraft noise. To ensure that future development is not adversely impacted by noise generators, or is itself a negative noise source, the Town will utilize land use compatibility guidelines as part of planning and development decisions.

Table N-2 summarizes the compatibility of new development relative to existing and future noise levels by identifying normally acceptable, conditionally acceptable and clearly unacceptable noise levels for various land uses.

Table N-2: Land Use Compatibility for Community Environments

Land Use Category	Community Noise Exposure Levels	Ldn
Residential – Low Density, Single Family Homes	Normally Acceptable Conditionally Acceptable Normally Unacceptable Unacceptable	60 dBA or less 60 – 65 dBA 65 – 75 dBA > 75 dBA
Schools, Libraries, Churches	Normally Acceptable Conditionally Acceptable Normally Unacceptable Unacceptable	60 dBA or less 60 – 70 dBA 70 – 80 dBA > 80 dBA
Playgrounds and Neighborhood Parks	Normally Acceptable Normally Unacceptable Unacceptable	70 dBA or less 70 – 75 dBA > 75 dBA

Interpretation of the Land Use Compatibility Chart

Normally Acceptable - The range of noise levels in this category is compatible with the specified land use type. No special noise insulation is required in buildings of conventional construction.

Conditionally Acceptable - The range of noise levels in this category is higher than those normally acceptable for the specified land use type. A detailed acoustic study should be undertaken to set forth design features that will reduce exterior noise reaching interior use spaces.

Normally Unacceptable - New construction or development of the specified land use type should be discouraged. If proposed development is to proceed, a detailed acoustic study must be prepared and needed noise insulation features incorporated into the design.

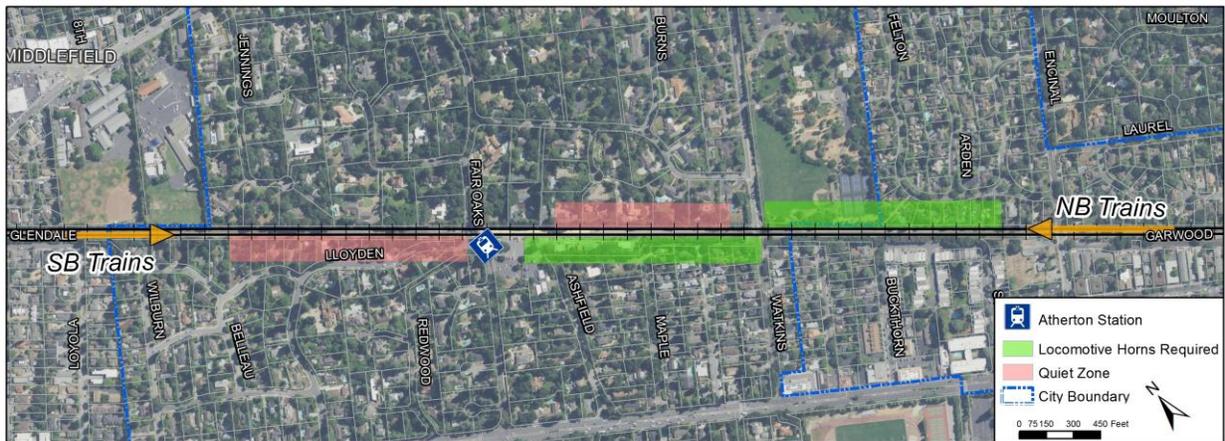
Unacceptable - New development of the specified land use type should not be undertaken when the site falls within the range of noise levels in this category.

Future Noise Environment

Figure N-2 illustrates the Future Noise Contours in Atherton. The contours for roadways are based on noise modeling which calculates traffic noise levels based on traffic counts and projections. The noise contours for the UP/Caltrain railroad corridor are based on existing noise measurement and projections for future anticipated service increases. Comparison of the Existing and Future Noise Contours indicates relatively minor increases in noise levels in the Town of Atherton.

Atherton Quiet Zone

The Atherton Fair Oaks Quiet Zone was officially established by the Town on June 13, 2016. A quiet zone is a section of rail line that contains one or more consecutive public highway-rail grade crossings at which locomotive horns are not routinely sounded. A quiet zone does not preclude the sounding of locomotive horns in emergency situations. The figure below shows the location of the quiet zone based on information on the Town of Atherton’s website.



Aircraft Noise

As stated above, flights from and to San Francisco International, San Carlos and Palo Alto Airports are noticeable in Atherton. Aircraft approaching San Francisco International are normally flying at low power and at a sufficiently high elevation to not present a nuisance to Atherton residents. Occasionally flights from and to San Carlos and Palo Alto Airports fly at lower elevations and can disturb residents.

Between approximately 2013 and 2018, a small private airline has landed at San Carlos Airport using an approach generally following the alignment of Middlefield Road. San Carlos Airport sources indicate that the airline use reached a peak of approximately 15 flights a day in early 2017. The number of flights per

day have been significantly reduced in 2018. The flights have been a source of numerous complaints from Atherton and other nearby residents. Noise levels of aircraft noise events were measured at an Atherton location near Marsh Road and Middlefield Road for two days in 2015 and in July 2018. The maximum noise level measurements ranged between L_{max} 61 and 73 dBA.

The Town has established a Working Group consisting of members of the community and City Council members to meet with representatives from airline, San Carlos Airport, and the Federal Aviation Administration (FAA) to find ways to address the noise issue. The Town supports continuing efforts to reduce the noise impacts from this source.

Future Rail Projects

Caltrain Electrification – The Peninsula Corridor Electrification Project, currently under construction, consists of converting Caltrain from a diesel-haul to Electric Multiple Unit (EMU) trains for service between San Francisco and San Jose. The electrification project allows for increased service, particularly in peak hours. Freight train activity would remain unaffected. The train horn use at at-grade crossings would be unaffected.³ Based on environmental studies conducted for the electrification project, the project would decrease train noise by using quieter EMUs but increase train noise due to the increase in service. As a result, the noise contours for the railroad corridor are considered to be the same in the existing and future conditions.

High Speed Rail – As described in the Circulation Element, the California High Speed Rail Authority proposes a high-speed train system for intercity travel in California between the major metropolitan centers of Sacramento and the San Francisco Bay Area in the north, through the Central Valley, to Los Angeles and San Diego in the south. Between San Francisco and San Jose, high-speed rail proposes to use the existing Caltrain corridor. The California High-Speed Rail Authority has not yet published project level quantitative noise impact analyses for the rail corridor in northern California, including the Town of Atherton. Therefore, noise levels and the presence of noise mitigation measures are not known at this time. The Town should continue to monitor the project planning process and incorporate appropriate noise data into the General Plan as it becomes available.

Relation of Noise Element to Other Laws

Relation of Noise Element to California Building Code

Section 1207 of the California Building Code requires that interior noise levels in new hotels, motels and multiple-family dwellings attributable to exterior sources shall not exceed Ldn 45 dBA. The California Green Building Code (Section 5.507) has standards for sound transmission for non-residential buildings. Although Atherton contains no land uses of this nature, detailed acoustical analysis is sometimes required for residential land uses in high impact areas. The acoustical report must discuss how the exterior noise levels can be controlled to Ldn 60 dBA, and how the noise environment inside these structures can be controlled to not exceed Ldn 45 dBA. The future noise contours in this element should be used to identify

³ The Atherton Fair Oaks Quiet Zone was established by the Town on June 13, 2016. A quiet zone is a section of rail line that contains one or more consecutive public highway-rail grade crossings at which locomotive horns are not routinely sounded.

whether a particular project will require an acoustical analysis to achieve the required interior noise standards. The appropriate exterior noise threshold is Ldn 60 dBA for residential buildings and Ldn 65 dBA for non-residential buildings. The acoustical analysis is appropriately included as part of the building permit.

Relation of Noise Element to CEQA

The California Environmental Quality Act (CEQA) requires the consideration of noise impacts of certain projects. Specifically, CEQA requires the consideration of noise impacts due to the substantial increase in noise. However, CEQA does not specify a method for determining when a project would cause a significant increase in noise. Policy N-1.6 includes quantitative criteria that can be used for assessing the impact of noise increases due to a project.

Noise Mitigation Methods

In situations where the range of noise levels are higher than that considered normally acceptable for a specified land use type it may be possible to reduce the effective noise level to achieve better compatibility. Each site has its own characteristics and problems, thus mitigation measures which are effective for one project may not apply to another. For this reason, it is not appropriate to predetermine the method by which noise levels should be reduced or controlled throughout the community. Regardless of the mitigation measure or combination of measures which is used, it is almost always less costly to include the mitigation in the design phase rather than dealing with the problem later. At the present time, there is no need for systematic enforcement of noise mitigation techniques discussed below. If in the future the Town Council deems appropriate, a program for implementation of mitigation measures may be developed.

The measure or combinations of measures that can be used to mitigate noise fall into four general categories:

- Site Planning
- Architectural Treatment
- Noise Barriers
- Construction Modification

Site Planning - By taking advantage of the natural shape and contour of sites it is often possible to orient buildings and other uses in a way that will reduce or eliminate noise impact. The ways in which site planning can be used to reduce noise impacts are as follows:

- Increase the distance between the noise source and the receiver.
- Place non-noise sensitive land uses (parking lots, maintenance facilities, utility areas) between the source and the receiver.
- Use non-noise sensitive structures (garages) to shield noise sensitive areas.
- Orient buildings so outdoor areas are shielded from noise.

Architectural Treatment - By attention to the types of uses being accommodated in a structure, the noise sensitive use can be moved to the quiet side of the building. Some typical examples are listed:

- Put bedrooms on the side of the house farthest from roadways.
- Do not locate outdoor balconies or patios facing major roadways.
- Design “U” shaped buildings to shield patios.

Noise Barriers - Solid barriers between the noise source and the noise-sensitive area block out sound waves. The minimum acceptable surface weight for an effective noise barrier is four pounds per square foot (equivalent to ¾ inch plywood) with no cracks or openings. To be effective, the barrier must interrupt the line of sight between the noise source and the receiver. Noise barriers are created by topographical features in some situations. Earth berms can be created by grading to achieve the same result. It should be noted that short barriers are not effective regardless of height because sound waves will pass around the end of them and still reach the receiver. This effect, called flanking, can be minimized by bending the wall or barrier back from the noise source at the ends of the barrier.

Construction Modification - Indoor noise levels due to exterior noise sources can be controlled by the noise reduction characteristics of the building’s shell. In general, windows and doors are the weakest links in the acoustic skin of a building. The amount of insulation and sealing required depends on the amount of noise reduction required. The following approaches may be considered:

- Use solid core doors having an acoustic door gasket.
- Use double-paned glass and gasketed window systems.
- Add insulation material to walls, ceilings and floors.

III. Goals, Objectives, Policies and Actions

Goal N-1:	To maintain the serene atmosphere of the Town by minimizing the intrusion of noise-generating activities.
Policy N-1.1:	To protect the peace, health and safety of Atherton citizens from unnecessary and unreasonable noise produced by any person, machine, animal or device.
Policy N-1.2:	Noise contours have been prepared in accordance with Section 65302(f) of the government Code and accompanies this Element. The noise contours shall be used as a tool for land use decision making.
Policy N-1.3:	If complaints about noise increase in the future, procedures for dealing with complaints in the community will be established.
Policy N-1.4:	Minimum Contents of Acoustical Reports – Site specific reports should contain a brief description of the project and the sensitivity of the land use type to noise, an accurate map describing the setting with surrounding uses and noise sources identified, and a quantitative description of the noise environment. For multi-story structures, the report should discuss noise effects for the upper floors. Field noise sample measurements should be taken over several days and the average Ldn calculated should be based on daytime, evening and nighttime readings. If the project is located within the vicinity of a previously collected measurement, as shown on the contour map, a measurement should also be duplicated at that point for purposes of updating the Community Noise Level Contour Map.
Policy N-1.5:	Qualifications for Preparing an Acoustical Report – Noise reports should be prepared by an acoustical engineer holding a degree in engineering, architecture, physics or allied discipline able to demonstrate a minimum of two years of experience in the following areas of acoustics: transportation noise forecasting, building acoustics, field measurement of noise and noise mitigation.
Policy N-1.6:	Consider requiring noise mitigation for a project that results in Ldn increases that are: a. 5 dBA or greater and the future Ldn is less than 60 dBA, or b. 3 dBA or greater and the future Ldn is 60 dBA or greater and less than 65 dBA, or c. 1.5 dBA or greater and the future Ldn is 65 dBA or greater.
Policy N-1.7:	Recognizing that aircraft and any associated issues thereto are federally regulated, the Town will work with nearby communities and other interested agencies to bring about a reduction of noise levels by private, military, public and commercial airplanes and helicopters.

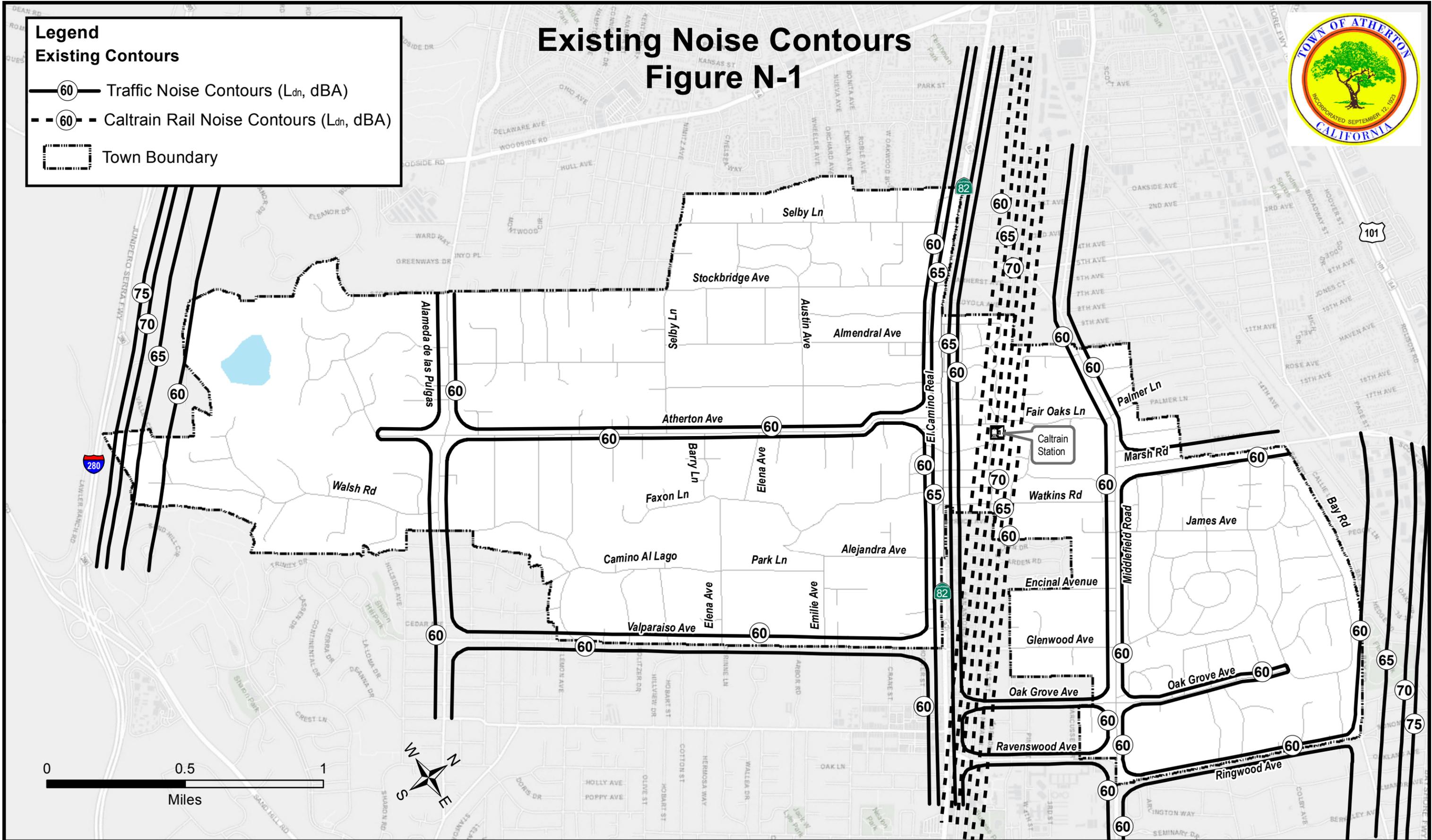


Existing Noise Contours Figure N-1

Legend

Existing Contours

- Traffic Noise Contours (L_{dn}, dBA)
- Caltrain Rail Noise Contours (L_{dn}, dBA)
- Town Boundary



OPEN SPACE AND CONSERVATION ELEMENT

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OPEN SPACE AND CONSERVATION ELEMENT

I. Purpose and Relation to Other Elements

The purpose of the Open Space portion of this element is to inventory and describe existing and proposed open space lands and uses and to identify goals and policies that support open spaces in Atherton. The purpose of the Conservation portion of this element is to describe the Town's natural and man-made resources; including land, water, ecosystems, cultural and living resources. The Open Space and Conservation Element seeks to maintain the low density, residential character of the Town.

In order to eliminate duplication, the Open Space and Conservation Elements of the Atherton General Plan have been consolidated into a single document, a procedure authorized by Government Code Sections 65301. Programs and policies outlined in the combined Element are to be coordinated with State and Regional open space and conservation policies.

In addition to being closely related to one another, open space and conservation relate closely to the Land Use and Circulation Elements. Decisions implemented under policies contained in those Elements could significantly impact upon open space and sensitive environmental features.

II. Background Information

Open Space Land Uses

The State-mandated Open Space Element is concerned with the management of open space resources, including cultural resources. Open space is defined as, "any parcel or area of public or private land, large or small, or water that is essentially unimproved and undeveloped." California Government Code requires local general plans to address six categories of open spaces:

- Open Space for Natural Resources
- Open Space for Managed Production of Resources
- Open Space for Outdoor Recreation
- Open Space for Public Health and Safety
- Open Space for Military Support
- Open Space for Tribal Resources

The Government Code also requires an Inventory of Open Space Lands. These topics are all addressed in the sections below.

Inventory of Open Space Lands

Table OSC-1 and Figure OSC-1 present an inventory of the open space lands existing in Atherton in 2017. The Town owned Holbrook-Palmer Park and the new Town Center Park are included in the category of Open Space for Outdoor Recreation. The privately-owned Menlo Circus Club Country Club equestrian center is also included in the category of Open Space for Outdoor Recreation. The California Water Service owned Bear Gulch Reservoir is included in the category of Open Space for Natural Resources and Open Space for Public Health and Safety.

Table OSC-1: Inventory of Atherton Open Space Lands

Facility	Category	Area
Holbrook-Palmer Park	Outdoor Recreation	22 acres
Town Center Park	Outdoor Recreation	0.98 acres ¹
Menlo Circus Club	Outdoor Recreation	29.25 acres
Bear Gulch Reservoir	Natural Resources / Public Health and Safety	99.22 acres

Open Space for Natural Resources

Bear Gulch Reservoir is a water storage facility located on the western border of Atherton. The reservoir is the main storage facility for the Bear Gulch District of the California Water Service. The facility holds 166 million gallons of water and serves over 55,000 people. The lands surrounding the reservoir function as a watershed for the facility. As both a potable water storage facility and a water shed area, the reservoir and surrounding lands owned by Cal Water are designated Open Space for Natural Resources.

Should the Bear Gulch Dam fail, portions of Atherton and west Menlo Park would be subject to inundation. The Safety Element of this General Plan addresses dam safety and the potential for inundation of properties below the dam.

The **large lot character of the community** including significant portions of landscaped and natural privately-owned property is also considered Open Space for Natural Resources, although not specifically identified on the Open Space Diagram.

¹ Source: DPW

Open Space for Managed Production of Resources

Groundwater is a sub-regional resource that produces irrigation water for some properties in Atherton. The quantity and quality of groundwater has been of concern, and the subject of past studies. Atherton, along with other concerned agencies cooperate in its study and management.

The Town of Atherton is part of the **San Francisquito Creek area** (creek itself located in the City of Palo Alto) of the Mid-peninsula that overlies the **Santa Clara and San Mateo Plain Groundwater Sub-basins**. Concerns about increased reliance on local groundwater resources for landscape irrigation were raised in the Town of Atherton by 1992. By then, five years of drought and the installation of more than 100 new wells raised concerns that such reliance might lead to land subsidence, declining water levels, and saltwater intrusion. A 1993-95 study² was commissioned by the U. S. Geological Survey, in cooperation with the Town of Atherton, which describes the general geohydrology of the San Francisquito Creek alluvial cone; historical groundwater development; present-day well distribution and groundwater use; the aerial and seasonal variation of groundwater levels and direction of flow-aerial variation in groundwater chemistry; and the establishment and initial measurements of a land elevation surveying network for monitoring potential land subsidence. The study findings included:

- The number of active, probably active, and unknown wells in Atherton ranged from 175 to 403 in 1994. Approximately 95% were used for private residential irrigation with the remainder used for public and private institutions.
- Groundwater levels were expressed in two ways: depth-to-water level below land surface or hydraulic head (i.e. water level expressed as an altitude above sea level). The depth-to-water level ranged from less than 20 feet below land surface nearest the San Francisco Bay to about 70 feet below land surface near Alameda de las Pulgas. The hydraulic head level ranged from less than 10 feet above sea level nearest the San Francisco Bay to about 60 feet above sea level near Alameda de las Pulgas.
- Groundwater flow was generally north or northeasterly towards San Francisco Bay.
- All measured hydraulic heads within the study area from April 1993 to September 1995 were above sea level, which indicated that saltwater intrusion was unlikely during that period.
- Water quality samples provided no evidence of saltwater intrusion from San Francisco Bay.
- The lack of land-elevation surveying network and historical data prompted the establishment of 21 surveying sites as part of the study. These sites plus one existing benchmark were surveyed in March 1994 to establish a baseline for monitoring subsidence. A determination as to whether subsidence is occurring presently or in the future will require repetitive measurements of land-surface elevation.

The Town³, along with the cities of Palo Alto, East Palo Alto, Menlo Park, Stanford University, San Mateo County, Santa Clara Valley Water District and several other agencies and non-governmental organizations have committed to:

² USGS Water Resources Investigations Report 97-4033

³ Resolution 14-21, September 17, 2014

- Collaborating with other agencies and organizations to better understand the hydrology and geology of the San Francisquito Creek area, and
- The sustainable management of local groundwater to protect its quality and ensure its availability during droughts and emergency situations.

While no lands are specifically designated Open Space for Managed Production of Resources, the Town's low intensity development, its support of Green Infrastructure, and policies directed toward sustainable management of local groundwater to protect its quality and future availability, act to help protect this natural resource.

Open Space for Outdoor Recreation

The facilities described below provide open space for outdoor recreation in Atherton.

Atherton's premier public park, **Holbrook-Palmer Park**, is a 22-acre open space facility located on Watkins Avenue near Middlefield Road. The Park offers many amenities to the community, including shady, tree-lined walking paths, tennis courts, a playground, a large sports field, open space and gardens. Several historic buildings provide a glimpse of Atherton's past, and provide space for meetings and classes. The Main House and the Jennings Pavilion are also used for meetings, weddings and larger events. The park supports a variety of activities, including sports, a place to play for children, classes, public and private events, a preschool and more.

Development of the Park is governed by the adopted⁴ **Holbrook-Palmer Park Master Plan 2014**. In the Master Plan it is noted that the need for new parkland is not anticipated as the Town's population is stable. There are, however, opportunities for refinement and improvements. The adopted Bike and Pedestrian Master Plan includes a link through Holbrook-Palmer Park to enhance cyclist connectivity and safety. Other recommendations include modifications to the Park Entrance, pedestrian access improvements and new path links, signage and lighting improvements. The Master Plan builds on the concept of the park as an arboretum. It recognizes the Little League Field improvements and relocation of the Playschool. The Master Plan calls for interior restoration and upgrades for expanding public use of the historic Carriage House and relocation and redesign of the Park Maintenance Building & Corporation Yard. Finally, parking management options are offered.

Atherton's second public park, the new Town Center Park (previously called the **Reading Park**) is located adjacent to the new Atherton Library that will be constructed as part of the Town's Town Center project at the corner of Dinkelspiel (Station) Lane and Maple Street. Landscaped open space provides a quiet area for reading and other passive activities, as well as a "Civic Court" with benches, a community porch and other landscaped areas. The approved construction plans for the new Town Center includes a new "Town Green" located between the new City Administration Building and the new Library. The Town Green and Library gardens would be the landscape focus of the new Town Center. It would also provide for stormwater detention and function as a component of **Green Infrastructure** (see section below).

⁴ Adopted May 20, 2015

The **Menlo Circus Club** is a private equestrian center located on Elena Avenue at Park Lane. The Club provides almost 30 acres of open space for outdoor recreation for its members including polo, swimming, tennis and horse shows.

Open spaces for outdoor recreation are also provided at the **public and private schools** in Atherton. Access to these facilities are generally restricted to students and faculty during school hours. The schools are listed in Table OSC-2.

Table OSC-2: Inventory of Schools in Atherton

School	Grades	Public/Private
Encinal School	Elementary	Public
Las Lomas School	Elementary	Public
Laurel School	Elementary	Public
Selby Lane School	Elementary	Public
Menlo-Atherton High School	High School	Public
Menlo School	Middle & High School	Private
Sacred Heart Schools	Elementary, Middle & High School	Private
Menlo College	College	Private

Open Space for Public Health and Safety

The only area in Atherton designated as Open Space for Public Health and Safety is the **Bear Gulch Reservoir** which is required for the protection of water quality and a water reservoir. Bear Gulch Reservoir is also categorized as an Open Space for Natural Resources and further described in that section.

Open Space for Military Support and Tribal Resources

Atherton has no areas designated as Open Space for Military Support, as there are no military facilities in or near Town. Neither does Atherton have areas designated as Open Space for Native American Tribal Resources, as there are no known Native American Tribal Resources in or near Town.

Conservation, Development and Utilization of Natural Resources

The State-mandated Conservation Element is concerned with the conservation, development, and utilization of natural resources, including plants and animal wildlife, water bodies and watersheds, forests, soils, minerals and energy conservation. California Government Code requires local general plans to address seven categories of natural resources:

- Water and its Hydraulic Force
- Forests
- Soils
- Rivers and Other Waters
- Harbors and Fisheries
- Wildlife
- Minerals and other Natural Resources

Water and Its Hydraulic Force

Groundwater management and recharge of the **Santa Clara and San Mateo Plain Groundwater Sub-basins** is discussed under the section entitled Open Space for Managed Production of Resources, above.

Surface stormwater runoff currently infiltrates into the open space and other pervious areas in the Town or flows on the ground surface until it is captured by the town's drainage infrastructure. See below for greater discussion of the Town's stormwater system. As mandated by the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP) Bay Area communities are to transition their "gray" or piped stormwater infrastructure to "green" infrastructure, as well as to increase the implementation of green infrastructure to aid in improving water quality. **Green Infrastructure** is an approach to managing and treating wet weather impacts that uses vegetation, soils, and other elements and practices to restore some of the natural processes to the management and improved quality of stormwater runoff. At the local level, Green Infrastructure is a series of natural areas or systems that provide habitat, flood protection and cleaner water. At the neighborhood or site level, Green Infrastructure stormwater management systems mimic nature to soak up, infiltrate, and store water. Examples include downspout rerouting to storage or permeable areas; rainwater harvesting, storage, and later use; rain gardens and planter boxes for infiltration, evaporation, and transpiration; bioswales that facilitate conveyance, filtration, and infiltration; permeable pavements that promote infiltration and storage; green streets and alleys designed for storage, infiltration and evapotranspiration; green roofs; and tree canopies. Green infrastructure facilities and opportunities are further defined and discussed under the Town's Green Infrastructure Plan.⁵

⁵ Source of highlighted text in this paragraph: CD+A

Forests

The entire Town of Atherton can be considered a **Coastal Oak Woodland**. Coastal Oak Woodland is defined primarily by the composition of its overstory. The Town's overstory consists of deciduous and evergreen hardwoods (mostly oaks) sometimes mixed with scattered conifers. The dominant oak species in Town are the Coast Live Oak (*Quercus agrifolia*) and the Valley Oak (*Quercus lobata*), along with many White Oaks (*Quercus alba*), Blue Oaks (*Quercus douglasii*), and Black Oaks (*Quercus kelloggii*). Species associated with Coast Live Oak on moister sites are Pacific Madrone, California Bay, Tanoak, and Canyon Live Oak, while Coast Live Oak occurs with Valley Oak, Blue Oak, and Foothill Pine on drier sites. Numerous other tree species including Coast Redwood (*Sequoia sempervirens*), Incense Cedar (*Calocedrus decurrens*), Ash (*Fraxinus* Spp.), Southern Magnolia (*Magnolia grandiflora*), Deodar Cedar (*Cedrus deodara*) and Elm (*Ulmus* Spp.) are found throughout the Town.

Over the years, Town policies have supported the preservation and protection of trees in general and heritage trees (trees 48 inches or greater in diameter measured 4 feet above grade) in particular. Tree protection was included as a policy in the 2002 General Plan, Open Space and Conservation Element. The Atherton Municipal Code describes why trees are essential to the health, welfare and quality of life to the citizens of Atherton:

1. To preserve the scenic beauty of the town and to ensure the privacy of its citizens;
2. To maintain ecological balance;
3. To prevent erosion of topsoil;
4. To protect against the hazards of floods and the risk of landslides;
5. To counteract air pollutants and oxygenate the air;
6. To absorb noise;
7. To provide the opportunity as green infrastructure;⁶
8. To maintain the climatic and microclimatic balance; and
9. To decrease high wind velocities.

Specific Tree Preservation Guidelines, Standards and Specifications were adopted in 2004 to regulate development and protection measures during construction. Those *Tree Preservation Guidelines* were updated in 2019 to assure their effectiveness and applicability to current practices.

Soils

Atherton is essentially built-out with low-density residential and supporting facilities (i.e. schools, public and quasi-public and similar uses). As such, soils supporting agricultural uses, the traditional subject of this topic, are less important. However, prevention of soil erosion and potential loss of topsoil is a Town objective. Further, prevention of soil compaction near the roots of trees and heritage trees in order to support their viability, is also a Town objective, as specified in the Tree Preservation Guidelines. Along with other techniques, the use of green infrastructure measures can aid in reducing soil erosion.⁷

⁶ Source: CD+A

⁷ Source: CD+A

Rivers, Other Waters and Floodwater Management

The primary waterway in Atherton is the **Atherton Channel**. The headwaters of the Atherton Channel originate west of Interstate 280 in the hillside area of the Town of Woodside. Historically, the Atherton Channel, like many of the smaller creeks in the area, did not have a permanent channel extending all the way downstream to the Bay. Most years, the small flows soaked into the porous soils in the flatlands; only during floods did the flow remain on the surface all the way to the Bay. Urbanization and development created impervious surfaces, which lead to the need for controlled drainage facilities to dispose of stormwaters. Prior to 1958, drainage facilities were constructed along the historic floodways as development proceeded. Developers that originally subdivided the land from large estates installed many of the facilities. The Town formed the Atherton Channel Drainage District in 1958 to construct and maintain storm water collection facilities in areas determined to be in the local stream flood plain. The District boundaries include most of the Town south of Atherton Avenue, a portion of unincorporated University Heights, and small areas of the City of Menlo Park and Town of Woodside.

In 2001 a **Town Wide Drainage Study** was prepared with the objectives of developing an inventory of the existing drainage system for incorporation into the Town Geographic Information System (GIS) database, assessing the weaknesses of the drainage system with input from the community, and developing estimated costs and a prioritized plan for improvements to the drainage system. By 2014 the Town had implemented 26 of the 55 improvement projects identified in the 2001 Drainage Study.

In 2014, an update to the 2001 Drainage Study was requested for several reasons. Recent residential development may have impacted previously identified drainage issues. Drainage improvements are now required to comply with the Municipal Regional Stormwater Permit (R2-2015-0049) adopted in 2015.⁸ In addition, the Town adopted drainage design criteria in January 2013 aimed to reduce peak stormwater flows and improve water quality. The goals of the desired drainage study update were to: update the inventory of the existing drainage system, assess current system weaknesses with input from the community, develop a prioritized plan for improvements to the drainage system, with itemized cost estimates, review stormwater management policies for compliance with the Green Infrastructure Plan, 2015 Municipal Stormwater Permit, and describe opportunities for regional stormwater detention. The *Town Wide Drainage Study Update* was completed in April 2015. The *Update* included recommended storm drainage improvement projects prioritized according to the tiers listed below.

Tier 1 Improvements mitigate flooding problems that can create significant life and safety issues.

Tier 2 Improvements are intended to avoid damage to private property caused by storm runoff from public areas.

Tier 3 Projects are located on public property and not influenced by downstream drainage system.

Tier 4 Projects are located on public property and influenced by under capacity downstream drainage system.

⁸ Source: CD+A

Tier 5 Projects were recommended in the 2001 Drainage Study but drainage issues in these areas have not been observed recently.

Atherton participates in the **San Mateo Countywide Water Pollution Prevention Program**⁹ (SMCWPPP), a partnership of the City/County Association of Governments (C/CAG), each incorporated city and town in the county, and the County of San Mateo, which share a common National Pollutant Discharge Elimination System (NPDES) permit. The Federal Clean Water Act and the California Porter-Cologne Water Quality Control Act require that large urban areas discharging stormwater into the San Francisco Bay or the Pacific Ocean have an NPDES permit to prevent harmful pollutants from being dumped or washed by stormwater runoff, into the stormwater system, then discharged into local waterbodies.

The Municipal Regional Permit outlines the State's requirements for municipal agencies in San Mateo County to address the water quality and flow-related impacts of stormwater runoff. Some of these requirements are implemented directly by municipalities while others are addressed by the SMCWPPP on behalf of all the municipalities. This is a comprehensive permit that requires activities related to construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The permit also requires a Green Infrastructure Plan,¹⁰ public education program, implementing targeted pollutant reduction strategies, and a monitoring program to help characterize local water quality conditions and to begin evaluating the overall effectiveness of the permit's implementation.

The Town actively enforces regulations related to **erosion and sedimentation control**. Development projects, especially those involving grading, excavation and vegetation removal, require preparation of erosion and sediment control plans in compliance with local and regional regulations and subject to local review.

Currently (2019) the Town of Atherton has entered into a Memorandum of Understanding¹¹ with the jurisdictions of the City of Redwood City, City of Menlo Park, and County of San Mateo to complete the planning, design and environmental permitting for the proposed **Bayfront Canal/Atherton Channel Flood Protection and Restoration Project**. The Atherton Channel and Bayfront Canal watersheds are multi-jurisdictional watersheds crossing all of the member jurisdictions. The two channels intersect in the City of Redwood City west of U.S. 101 near the Marsh Road interchange. Both watersheds have experienced decades of repetitive flooding. All of the member jurisdictions have been impacted by flooded streets, residences and businesses.

The Town is currently considering alternate locations for a **Stormwater Capture Project**: a runoff diversion, storage and treatment system. This project has several objectives, including those listed below.

1. Capturing dry weather runoff in order to eliminate the transport of pollutants to San Francisco Bay,

⁹ **STOPPP** is another acronym for the San Mateo Countywide **Stormwater Pollution Prevention Program**.

¹⁰ Source: CD+A

¹¹ Source: DPW

2. Capturing at least the first flush of wet-weather runoff to reduce the load of pollutants transported to the Bay,
3. Detaining potential flood flows from the Atherton Channel,
4. Meeting requirements of the MRP including implementing green infrastructure opportunities,¹²
5. Minimizing the on-going operations and maintenance costs, and
6. Reusing storm water for irrigation.

Harbors and Fisheries

Atherton has no harbors or fisheries in or near Town.

Wildlife and Habitats

The California Department of Fish and Game maintains the California Natural Diversity Database (CNDDDB), that inventories the status and location of rare plants, animals and natural habitats in California. A search of the database was completed for Atherton and the surrounding area, to identify rare and sensitive species and habitats with the potential to occur within the Town. Table OSC-3 lists the rare and sensitive species and communities that may occur within the Town. The Town monitors new development to ensure that it does not negatively impact sensitive species, especially those listed in the table.

Table OSC-3: Biological Resources with the Potential to Occur in Atherton

Common Name	Scientific Name	Type	Status
San Mateo thornmint	<i>Acanthomintha duttonii</i>	Plant	FE, 1B ¹³
Franciscan onion	<i>Allium peninsulare</i> var. <i>franciscanum</i>	Plant	1B
Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	Plant	1B
Kings Mountain manzanita	<i>Arctostaphylos</i>	Plant	1B

¹² Source of highlighted text in this paragraph: DPW and CD+A

¹³ Status:

FE = Federally listed as endangered

FT = Federally listed as threatened

FD = Federally delisted

SE = State-listed as endangered

ST = State-listed as threatened

CSC = California Species of Special Concern

CFP = California Fully Protected Species

1A = California Rare Plant Rank List 1A (plants presumed extirpated in California and either rare or extinct elsewhere)

1B = California Rare Plant Rank List 1B (plant species that are rare or endangered in California and elsewhere)

Congdon's tarplant	<i>Centromadia parryi</i> ssp. <i>Congdonii</i>	Plant	1B
Franciscan thistle	<i>Cirsium andrewsii</i>	Plant	1B
Fountain thistle	<i>Cirsium fontinale</i> var. <i>fontinale</i>	Plant	FE, 1B
Lost thistle	<i>Cirsium praeterens</i>	Plant	1A
San Francisco collinsia	<i>Collinsia multicolor</i>	Plant	1B
Santa Cruz Cyprus	<i>Cupressus abramsiana</i>	Plant	FE, 1B
Western leatherwood	<i>Dirca occidentalis</i>	Plant	1B
Tiburon buckwheat	<i>Eriogonum luteolum</i> var. <i>caninum</i>	Plant	1B
San Mateo woolly sunflower	<i>Eriophyllum latilobum</i>	Plant	FE, 1B
Hoover's button-celery	<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Plant	1B
Hillsborough chocolate lily	<i>Fritillaria biflora</i> var. <i>ineziana</i>	Plant	1B
Fragrant fritillary	<i>Fritillaria liliacea</i>	Plant	1B
Marin dwarf-flax	<i>Hesperolinon congestum</i>	Plant	FT, ST, 1B
Kellogg's horkelia	<i>Horkelia cuneate</i> ssp. <i>Sericea</i>	Plant	1B
San Francisco lessingia	<i>Lessingia germanorum</i>	Plant	FE, 1B
Coast lily	<i>Lilium maritimum</i>	Plant	1B
Davidson's bush-mallow	<i>Malacothamnus davidsonii</i>	Plant	1B
Hall's bush mallow	<i>Malacothamnus hallii</i>	Plant	1B
White-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>	Plant	FE, SE, 1B
San Francisco owl's-clover	<i>Triphysaria floribunda</i>	Plant	1B
Caper-fruited tropidocarpum	<i>Tropidocarpum capparideum</i>	Plant	1A
Bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	Invertebrate	FT

California tiger salamander	<i>Ambystoma californiense</i>	Amphibian	FT, CSC
California red-legged frog	<i>Rana draytonii</i>	Amphibian	FT, CSC
Western pond turtle	<i>Actinemys marmorata</i>	Reptile	CSC
San Francisco garter snake	<i>Thamnophis sirtalis tetrataenia</i>	Reptile	FE, SE
White-tailed kite	<i>Elanus leucurus</i>	Bird	CFP
American peregrine falcon	<i>Falco peregrinus anatum</i>	Bird	FD, SE, CFP
Northern harrier	<i>Circus cyaneus</i>	Bird	CSC
Burrowing owl	<i>Athene cunicularia</i>	Bird	CSC
Vaux's swift	<i>Chaetura vauxi</i>	Bird	CSC
Olive-sided flycatcher	<i>Contopus cooperi</i>	Bird	CSC
Loggerhead shrike	<i>Lanius ludovicianus</i>	Bird	CSC
Pallid bat	<i>Antrozous pallidus</i>	Mammal	CSC
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	Mammal	CSC
Western mastiff bat	<i>Eumops perotis californicus</i>	Mammal	CSC
San Francisco dusky-footed woodrat	<i>Neotoma fuscipes anneciens</i>	Mammal	CSC
American badger	<i>Taxidea taxus</i>	Mammal	CSC

Riparian habitats along the Atherton Channel and other drainages are important to providing plant and wildlife habitats and controlling erosion.

The coastal oak woodland habitat that exists throughout Atherton is an important natural resource and is described in greater detail under the Section entitled "Forests".

Minerals and Other Natural Resources

Atherton is within an urban area with no known mineral or other similar natural resources. The San Mateo County General Plan Resources Map does not identify any known mineral resources or mineral recovery sites within or adjacent to the Town.

Cultural Resources

Cultural resources in Atherton take the form of historically significant buildings, structures and artifacts. Several of the historically significant buildings are privately owned; only one of which has been listed on the National Register of Historic Places.

Table OSC-4: Atherton’s Historically Significant Buildings and Structures

Building or Structure	Year Constructed	Status
Watkins/Cartan House	1866	Privately owned, listed in the National Register of Historic Places (NRHP)
Water Tower, Holbrook-Palmer Park	Circa 1870	Publicly owned, listed in the NRHP
Gen Merrill Carriage House, Holbrook-Palmer Park	1896	Publicly owned, listed in the NRHP
Sacred Heart Schools Main Building	1898 and 1915	Privately owned, appears eligible for listing as a historic structure
Menlo School, Stent Family Hall (Douglass Hall aka Payne-Douglass House)	1913	Privately owned, listed in California Point of Historical Interest Log ¹⁴ and Historic American Buildings Survey, ¹⁵ potentially eligible for listing in the NRHP
Perry Stable (Associated with Australian Racehorse Phar Lap)	Circa 1920	Privately owned, eligible for listing in the California Register of Historical Resources (CRHR)
Caltrain Station, Town Center	Mid-1920’s	Publicly owned, appears eligible for listing in NRHP
Town Hall (Council Chambers building) Town Center	1928	Publicly owned, appears eligible for inclusion in CRHR

The Town also has a policy of protecting and preserving historical artifacts. The term historical artifact is defined as a structure or object that meets the criteria for listing on the national, state or local level. A 2006 survey of potential historical artifacts resulted in compilation of the official catalog known as the

¹⁴ California Department of Parks and Recreation

¹⁵ San Mateo County’s Inventory of Historic Resources

Atherton Historical Artifact Inventory. The policy specifically excludes buildings designed for human occupation and objects housed in the interiors of buildings.

Climate Action Plan

Atherton's proposals and policies related to climate change are contained in its adopted¹⁶ **Climate Action Plan**. The Climate Action Plan (CAP) is summarized in the Land Use Element of this General Plan. Transportation aspects of the CAP are addressed in the Circulation Element. Energy, water and solid waste programs and policies are addressed in this Open Space and Conservation Element.

Energy and water-saving measures can help reduce Greenhouse Gas (GHG) emissions and impacts from drought conditions. Building energy is the sector with the most immediately achievable and affordable reduction opportunities. A primary focus of the CAP is on residential energy efficiency strategies to significantly reduce existing emissions and on the voluntary implementation of new building standards which incentivize new home builders towards designing net zero energy homes.

Reducing the amount of waste deposited into the landfill through material reuse, reduction, and recycling is an important strategy to reduce GHG emissions. Waste reduction and recycling help reduce emissions and the amount of single-use materials.

¹⁶ Adopted October 19, 2016

III. Goals, Objectives, Policies and Actions

Goal OSC-1:	Protect both publicly and privately held open space lands from deterioration of their semi-rural charm, scenic value and environmental equilibrium.
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Objective OSC 1.1: Preserve presently existing open space, wildlife and vegetation.

Objective OSC 1.2: Prevent developmental encroachment on open space and sensitive environmental resources.

Objective OSC 1.3: Endeavor to prevent soil erosion and the potential loss of topsoil through the development review process.

Policy OSC-1.1: The Town shall endeavor to protect scenic resources, significant stands of natural vegetation, wildlife habitat, public safety and significant archaeological resources, both publicly and privately held.

Policy OSC-1.2: The Town seeks to preserve the open space characteristics of existing public and private schools, churches, the Menlo Circus Club, the Bear Gulch Reservoir property and the public parks.

Policy OSC-1.3: Holbrook-Palmer Park shall serve as the Town’s primary outdoor recreational facility subject to the following conditions:

- A. The property shall not be used, occupied or operated for commercial or housing purposes except those which are strictly incidental and appropriate to its use as a public recreational park.
- B. The Park is to be used for the benefit of the citizens of Atherton.
- C. The Park may not be used for political purposes except those which involve the public affairs of the Town of Atherton as a whole.
- D. The Park may be rented for use by others in accordance with the standards established by the Parks and Recreation Committee.

Policy OSC-1.4: Maintain Holbrook-Palmer Park so that the Park retains its utility for community activities and events while remaining a tranquil haven for Park visitors, which balances the needs of the community.

Policy OSC-1.5: In addition to Holbrook-Palmer Park and the Town Center Park, public elementary and high school properties should also be considered for recreational purposes.

Action OSC-1.1: Minimum lot sizes, setback restrictions, height limitations, tree protection and preservation, and sign regulations shall be employed to accomplish open space and conservation objectives.

Action OSC-1.2: The Town shall evaluate the potential for cooperative recreational use of existing school sites.

Goal OSC-2: Protect and enhance the existing Coastal Oak Woodland character of the Town.

Policy OSC-2.1: Trees shall be preserved wherever practical. This policy shall be explicitly considered during the development and subdivision process.

Policy OSC-2.2: Wherever possible, drought tolerant native species trees shall be used for new and replacement planting and be tolerant of seasonal water inundation where used in or adjacent to green infrastructure facilities.¹⁷

Policy OSC-2.3: Enforce the Heritage Tree Ordinance and Tree Preservation Guidelines and Standards, or equal document.

Goal OSC-3: Minimize the impacts of flooding on health, safety and property damage.

Policy OSC-3.1: New development shall provide detention volume to attenuate any increase in stormwater runoff caused by increased imperviousness created by the proposed development.

Policy OSC-3.2: The Town will assure that opportunities for green infrastructure are routinely considered by all Town departments.¹⁸

Action OSC-3.1: The Town will continue to seek and coordinate partnering opportunities for shared green infrastructure projects with other public and private entities and property owners, as feasible.¹⁹

Action OSC-3.2: The Town will encourage property owners to incorporate water conservation techniques into their landscaping to reduce water usage and use green infrastructure techniques to capture and/or treat rainfall and stormwater runoff at its source, as feasible.²⁰

Goal OSC-4: Protect both publicly and privately held cultural resources from deterioration and/or destruction.

¹⁷ Source: CD+A

¹⁸ Source: CD+A

¹⁹ Source: CD+A

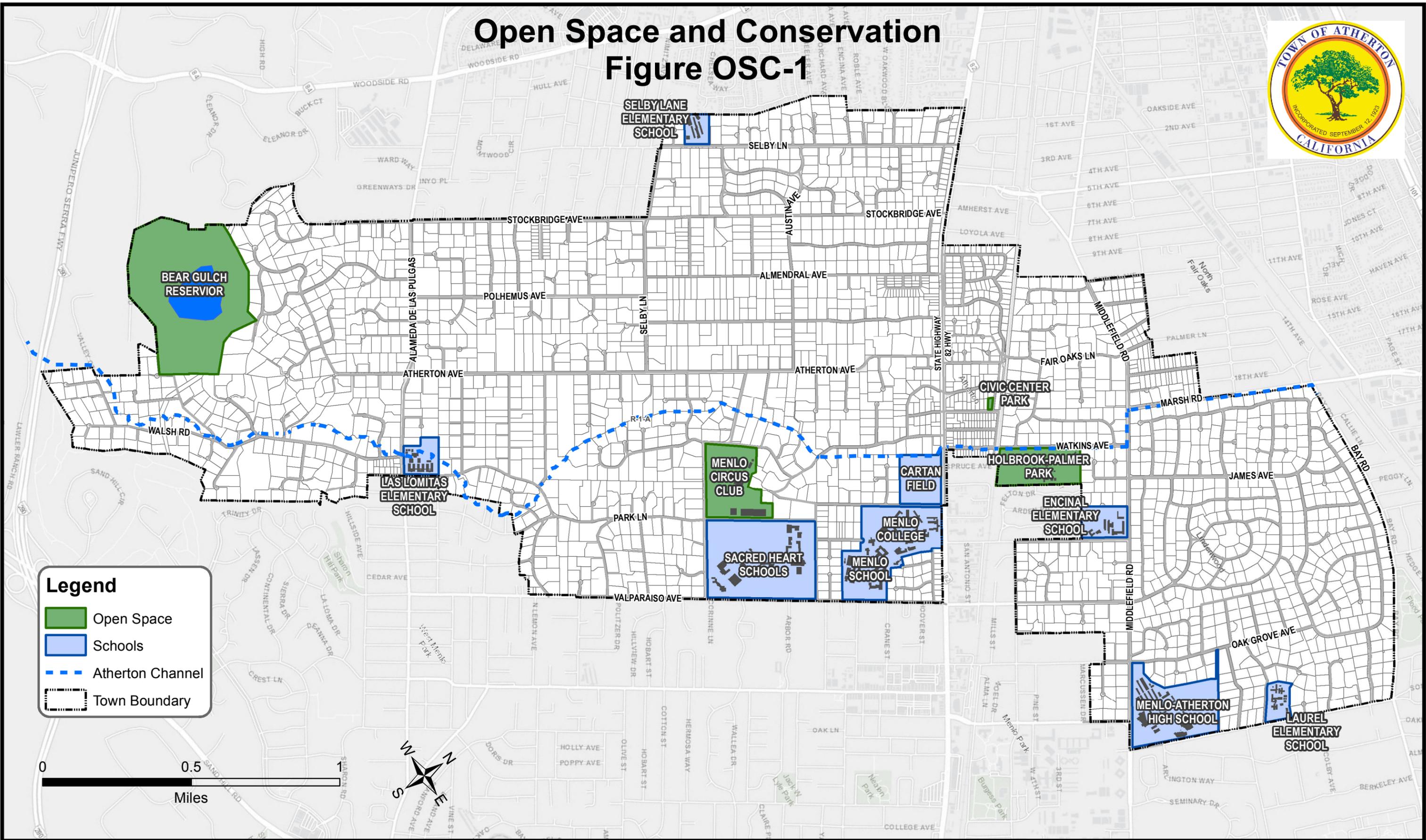
²⁰ Source: CD+A

Policy OSC-4.1: Encourage the preservation of both private and public historical resources and artifacts for the benefit of future generations.

Policy OSC-4.2: The Town will comply with minimum State requirements in the event archaeological or paleontological resources are discovered during construction.

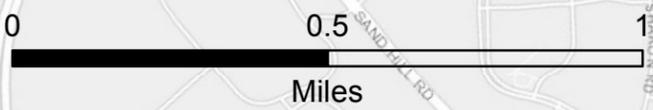
Goal OSC-5: Implement the GHG programs in the Atherton Climate Action Plan related to energy efficiency, community waste generation, and reduced water consumption.

Open Space and Conservation Figure OSC-1



Legend

- Open Space
- Schools
- Atherton Channel
- Town Boundary



COMMUNITY SAFETY ELEMENT

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COMMUNITY SAFETY ELEMENT

I. Purpose and Relation to Other Elements

The Safety Element is intended to describe natural and man-made disasters which may pose a hazard to the residents of Atherton. It sets forth policies for responding to threats to public safety. It includes identification of unreasonable risks, and policies for the protection of the community from such risks. The goal of the safety element is to reduce the potential short and long-term risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, droughts, earthquakes, landslides, climate change, and other hazards.

The Safety Element is closely related to the Circulation, Land Use, and Open Space and Conservation Elements as development plans must adequately account for public safety considerations, and open space for public health often incorporates area of increased hazard (for example, increase hazard associated with dam safety within the Bear Gulch Reservoir open space).

II. Background Information

Seismic Hazards

The primary seismic threat to the Town of Atherton is represented by the San Andreas fault and its attendant rift valley which lies approximately five miles to the west of the Town. This fault has a long history of earthquake activity. While there are no known active or potentially active faults within the Town of Atherton, it is subject to periodic, very strong earthquakes which originate either on the San Andreas or from the Hayward and Calaveras faults in the East Bay. Most geologists agree that an earthquake of comparable magnitude to that which occurred in 1906 may well be experienced by the current generation of Bay Area residents.

Alquist-Priolo Earthquake Fault Zones

Alquist-Priolo Earthquake Fault Zones are regulatory zones, delineated by the State Geologist, within which site-specific geologic studies are required to identify and avoid fault rupture hazards prior to subdivision of land and/or construction of most structures for human occupancy. There are no Alquist-Priolo Earthquake Fault Zones within the Atherton Town limits. The closest such zone, the San Andreas Fault Zone, is located in Woodside, approximately one-half mile southwest of I-280. Other such zones are located in the East Bay and include the Hayward Fault Zone and the Calaveras Fault Zone.

Seismic hazards associated with earthquakes include the following:

Surface Rupture

Seismically induced surface rupture refers to a break in the ground's surface and associated deformation resulting from the movement of a fault. Surface rupture is usually limited to a narrow zone along the fault.

Since there are no known active or potentially active faults within the Town of Atherton, it is unlikely that significant seismically induced surface rupturing will occur within Town.

Ground Shaking

Seismically induced ground shaking poses a serious potential hazard to Atherton. In the future, the major source of earthquake damage is likely to come from the San Andreas Fault system, including the Hayward Fault and the Calaveras Fault branches in the East Bay area. The principal effect of such an earthquake in most of the Town will be a sudden, unexpected initiation of a strong shaking motion of the ground, which could last approximately one minute or more. This ground shaking can be expected to be hazardous to people during the earthquake.

Ground Failure

Seismically induced ground failure refers to mudslides, landslides, liquefaction or soil compaction caused by a seismic event. The California Department of Conservation has mapped areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation would be required. Mitigation in this context means those measures that are consistent with established practice and that will reduce seismic risk to acceptable levels.

Tsunami

A **tsunami** refers to a series of waves generated in a body of water by a rapid disturbance that vertically displaces the water. These changes can be caused by an underwater fault rupture that generates an earthquake, a volcanic eruption, or underwater landslides typically triggered by earthquakes. The California Emergency Management Agency has prepared a series of maps plotting the potential inundation line for a tsunami runup along the San Francisco Bay shoreline. The inundation line represents the maximum considered tsunami runup from a number of extreme, yet realistic, tsunami sources. In the Atherton vicinity, the potential inundation line follows the southwesterly shoreline of the Westpoint Slough and the Ravenswood Slough located in the salt evaporators within the margins of San Francisco Bay. A runup of approximately 4 feet at Ravenswood Point (East Palo Alto) could occur, as estimated by the US Geological Survey. The inundation line runs approximately ½ to 1-mile northeast of the dike protecting the east Menlo Park and Redwood City industrial area. As the inundation line is located approximately 1 to 1 ½ miles northeast of the Atherton City Limit along Bay Road, there appears to be little chance that a tsunami would affect land within the Town. Further since the inundation line is located approximately ½ to 1-mile northeast of US 101 there appears to be little chance that a tsunami would affect that major evacuation route.

Seiche

Seismic **seiches** (sloshing) are standing waves set up on rivers, reservoirs, ponds, and lakes when seismic waves from an earthquake pass through the area. A seiche can overflow or even erode an embankment, potentially releasing significant volumes of water that could flood and damage developed areas downstream. Bear Gulch Reservoir is the only body of water within Atherton large enough to be subject to a seiche. A potentially damaging seiche at this location could adversely impact properties and development downstream.

Dam Failure

The Bear Gulch Reservoir Dam is the only dam in Atherton and is large enough to endanger lives and property in the event of a failure. A seismic event could cause the dam to fail and endanger an estimated population of approximately 1,000 people, according to the Atherton Emergency Operations Plan. The flood plain that would result from catastrophic failure of this dam has been mapped by California Water Service Company (Cal Water), the dam owner; the map is on file with the Office of Emergency Services.

The California Division of Safety of Dams (DSOD), (a division of the Department of Water Resources [DWR]) routinely and periodically inspects the dam for performance and problem identification. Should a problem be identified that could lead to failure potential the dam owner (or as directed by the DSOD) takes mitigating actions such as reducing the water level to avoid catastrophic loss of water or other actions specified in its Emergency Action Plan.

The Atherton neighborhood most seriously threatened by dam failure and wildfire hazard is the Walsh Road neighborhood. This neighborhood has only one primary evacuation route; Walsh Road, which is a narrow, two lane residential street that intersects with Alameda de las Pulgas. Two other evacuation routes have been identified:

- The main secondary automobile evacuation route is the road at the end of Reservoir Road through the Cal Water property adjacent to Bear Gulch Reservoir connecting to Moore Road. Cal Water must open the gate at the entrance of the road for this to be passable. Cal Water maintains a 24/7 presence at the Bear Gulch site. Calling 1-855-CAL-WATER, then selecting “1” for emergency will provide access to a Cal Water employee who will notify an on-site employee to unlock the gate.
- There is a pedestrian only exit using the horse tunnel from Valley Court under highway 280.

In the event of a fire or flood, a warning siren has been installed at the Cal Water facility on Reservoir Road. The siren can be activated by the Fire or Police Department to advise residents that an evacuation should take place.

An all-volunteer group of concerned Atherton residents formed the Atherton Disaster and Preparedness Team (A.D.A.P.T.) to collaborate with town officials, Menlo Park Fire, Atherton Police and other professional emergency responders and the California State “Get Ready” and FEMA’s/US Citizens’ Corps programs to help organize, train, educate, communicate with and aid fellow Athertonians in preparing for major emergencies and natural disasters. A.D.A.P.T is sponsored by the Atherton Police Department and is linked to the Menlo Park Fire Protection District’s Community Crisis Management (CCM)/Community Emergency Response Team (CERT) Program.

Slope Instability

Landslides include all movements of soil, rock, or debris as a result of falling, sliding, or flowing. Most landslides are a combination of two or more types of motion and/or material. Landslides are categorized according to the types of motion and material involved. They can be directly caused by earthquakes or be completely independent of them.

- Falls describe the sudden movement of material from vertical or near-vertical slopes and are generally labeled by the type of material displaced (e.g. soilfall, rockfall).

- Slides refer to movements in which the material moves more or less as a unit along recognizable shear surface. If the shear surface is concave, the slide movement will be rotational and is denoted by the term "slump." If the shear surface is planar, translational movement occurs and the term "slide" is used alone. Both slides and slumps are further classified according to the type of material involved (e.g., earth slump, rockslide, debris slide where "debris" refers to combinations of soil, weathered bedrock and/or organic material).
- Flows describe the movement of material in which a myriad of small-scale movements rather than massive sliding is the dominant mechanism of transport. This category is further broken down by the type of material involved and the rate at which it moves (e.g., debris flow, mudflow). The modifier "avalanche" is used to describe exceptionally fast flows.

Much of the land surface in Atherton is relatively flat and not subject to slope instability. Land west of Alameda de las Pulgas however is steeper and therefore subject to slope instability. A map prepared by San Mateo County which shows the general location of existing landslides, characterizes the area west of Alameda de las Pulgas as having "few landslides". Another map produced by the Association of Bay Area Governments (ABAG) identifies "earthquake induced landslide study zones" and "rainfall induce study zones" each contain a few acres on the south side of Walsh Road and near Bear Gulch Reservoir.

Land Subsidence

Land subsidence is defined as the lowering of the land surface. Many different factors can cause the land surface to subside. Subsidence can occur rapidly due to a sinkhole or underground mine collapse, or during a major earthquake. It may happen slowly in the case of groundwater withdrawal or natural gas extraction. In Atherton the subsurface composition is such that sinkholes have rarely occurred. There are there no known mines or natural gas fields. There has been groundwater withdrawal, however the withdrawal has not resulted in significant land subsidence. A program to monitor measurements of land-surface elevations and future subsidence is on-going and described in the Open Space and Conservation Element. While there could be seismically induced land subsidence in Town during a major earthquake, such an effect has not been known to have occurred in the past.

Liquefaction

Loose sand and silt that is saturated with water can behave like a liquid when shaken by an earthquake. This phenomenon is called **liquefaction**. During an earthquake the soil can lose its ability to support structures, flow down even very gentle slopes, and erupt to the ground surface to form sand boils. Many of these phenomena are accompanied by settlement of the ground surface, usually in uneven patterns that damage buildings, roads and pipelines.

A map produced by ABAG identifies liquefaction susceptibility hazards in Atherton. In general, the area of Town northeast of a line formed by Euclid Avenue/Monte Vista Avenue/Camino por los Arboles is characterized as having a "moderate susceptibility". The narrow band of land adjacent to the Atherton Channel is characterized as having a "very high susceptibility". The balance of the Town is characterized as having a "very low to low susceptibility".

Flooding

Flooding has not presented a significant, extensive hazard in Atherton in the past. There have been numerous recurring localized areas of flooding. During the 2001 Town-wide Drainage Study, 97 localized flooding complaints were identified and evaluated. These events were classified by type of problem such as building floods, saturated or clogged drywell, channel or ditch overflow, driveway and intersection floods, and storm system overflow or clog. Many of these problem areas were addressed with improvement projects implemented since 2001 or with maintenance activities.

In 2015 the Town-wide Drainage Study was updated. During that process, 17 localized flooding complaints were identified; three of which coincided with flooding complaints from the 2001 Drainage Study. The report includes general and specific recommendations for mitigating these hazards.

There are no Federal Emergency Management Agency (FEMA) identified flood prone or hazard areas in Atherton. The Town has chosen not to participate in the National Flood Insurance Program.

There are areas within the Town, due to their proximity to the Atherton Channel or in portions of lower-lying Lindenwood, which require raised finished floor elevations (typically by approximately 1 foot) during new construction. Finished floor elevations in these areas are recommended by the project engineer based on studies required by the Town during the grading and drainage plan review process.

Flooding resulting from failure of the Bear Gulch Reservoir dam is a hazard that is addressed under the topic of Dam Failure in this Element.

Atherton has entered into a partnership with the jurisdictions of Redwood City, Menlo Park, and San Mateo County to complete the planning for the proposed **Bayfront Canal/Atherton Channel Flood Protection and Restoration Project**. The Atherton Channel and Bayfront Canal watersheds have experienced decades of repetitive flooding in the lower reaches of the channels in Redwood City. This project is further discussed in the Conservation Element.

The proposed Atherton **Water Capture Project**, a runoff diversion, storage and filtration system is discussed in the Open Space and Conservation Element.

The use of green infrastructure techniques and systems can help to reduce the impacts of localized flooding associated with stormwater runoff, the Atherton Channel, and Bayfront Canal while also assisting the Town in satisfying the provisions of the MRP.¹

Urban and Wildland Fires

Fire protection for Atherton is provided by the Menlo Park Fire District; a special district that serves the cities of Menlo Park, Atherton, East Palo Alto and portions of San Mateo County. Backup assistance for the Fire District is available through mutual aid agreements. All fire agencies in San Mateo County have signed the California Master Mutual Aid Agreement and participate in mutual aid operations as required. The Menlo Park Fire District also has specific Mutual Aid agreements with the cities of Palo Alto and Redwood City.

¹ Source: CD+A

The Fire District actively works to prevent structural and wildfires through its regulations, education and training programs; some of which include residential and commercial fire sprinkler requirements, plan review of new construction, periodic inspection of commercial buildings, weed abatement, defensible spaces, home ignition zones, disaster and emergency preparedness.

Wildland fire is a hazard that exists throughout the Town of Atherton. The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire threatened communities in the State. The entire Town of Atherton has been identified as a “Community At Risk”.

Wildfire hazard in the Walsh Road neighborhood is a topic that is addressed in the Dam Failure section of this Element.

Emergency Operations Plan

The Town of Atherton Police Department and the Menlo Park Fire Protection District have jointly prepared the Town of Atherton **Emergency Operations Plan** (EOP) which describes how the jurisdictions will manage and coordinate resources and personnel responding to emergency situations. The Atherton EOP, along with a companion document; the Atherton **Hazard Mitigation Strategies** (HMS) is the Town’s Local Hazard Mitigation Plan specified in the federal Disaster Mitigation Act of 2000 (P.L. 106-390). The HMS contains policies designed to mitigate hazards identified in the EOP.

The Atherton Town website currently has a section entitled “Evacuation Plan & Emergency Siren” that provides information about the Walsh Road emergency siren and evacuation routes in the event of a fire or flood. The same website section provides general information about the **Atherton Disaster and Preparedness Team (A.D.A.P.T)** a Police Department sponsored emergency preparedness and action program as well as other preparedness resources for the community.

The Town of Atherton EOP is designed to be consistent with Homeland Security Presidential Directive (HSPD)-5, National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS) requirements. The plan:

- Conforms to the National Incident Management System (NIMS) and the Standardized Emergency Management System (SEMS)
- Provides Emergency Operations Center (EOC) responders with procedures, documentation, and user-friendly checklists to effectively manage emergencies
- Provides detailed information of supplemental requirements such as Public Information, Damage Assessment, and Recovery Operations.

The Town of Atherton Emergency Operations Plan is a document that is continually evolving. The EOP provides a comprehensive emergency response document that includes detailed information covering Emergency Operations Center procedures, documentation and reference and support information. Pursuant to California Government Code Section 65302.6, the Atherton Emergency Operations Plan together with the Atherton Hazard Mitigation Strategies are hereby adopted by reference and included in this Community Safety Element. Further, any future amendments to the EOP and HMS are adopted by reference and included in this Element.

The Town also participates with a coalition of San Mateo County cities and special districts in updating and adopting the San Mateo County Hazard Mitigation Plan.² This plan includes an assessment of the risk and vulnerability to the impacts of natural hazards, develops a mitigation strategy consistent with a set of uniform goals and objectives, and creates a plan for implementing, evaluating and revising the strategy.

Climate Change

Atherton’s proposals and policies related to climate change are contained in its adopted³ **Climate Action Plan**. The Town’s Climate Action Plan serves as a guiding document to identify methods that the Town and community can implement to significantly reduce greenhouse gas (GHG) emissions. The Plan provides a comprehensive roadmap of programs that can be implemented to reduce emissions and increase sustainability. Transportation aspects of the Climate Action Plan are addressed in the Circulation Element. Energy, water and solid waste programs and policies are addressed in the Open Space and Conservation Element.

Atherton has adopted a target of reducing GHG emissions to 15 percent below 2005 levels by 2020.

Evacuation Routes and Peak Load Water Supply Requirements

Pursuant to the State Planning Guidelines, evacuation routes have been designated in the Policies below. State Planning Guidelines require the Safety Element to include a statement specifying the peak load water supply requirements of the Town. Peak load water supply requirements currently average just under five million gallons per day during the months of August and September.

Emergency evacuation routes are shown on the Community Safety Diagram, Figure CS-1. These routes are generally located along minor arterials that provide access from all Atherton neighborhoods to El Camino Real, and, ultimately U. S. 101 and I-280. The streets included are El Camino Real, Middlefield Road, Marsh Road, Alameda de las Pulgas, Atherton Avenue/Fair Oaks Lane, Valparaiso Avenue, Stockbridge Avenue, Glenwood Avenue, Encinal Avenue, Watkins Avenue and Ringwood Avenue. These routes would be used for general emergencies (e.g. earthquake, wildfire) and dam failure at Bear Gulch Reservoir.

² Adopted October 19, 2016

³ Adopted October 19, 2016

III. Goals, Objectives, Policies and Actions

Goal CS-1:	The Town recognizes the potential danger to public safety that may result from natural or man-made causes and seeks to minimize the public risks in such hazards.
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Goal CS-2:	Reduce the risk of injury, structure and property damage from exposure to seismic activity.
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Policy CS-2.1: Support the Goals, Objectives and Policies contained in adopted Atherton local hazard mitigation plans and Emergency Operations Plans.

Policy CS-2.2: Public education, research and information dissemination on seismic hazards and emergency response shall be encouraged.

Policy CS-2.3: The Town shall seek to improve interjurisdictional cooperation with other agencies for geotechnical safety in land use planning, hazard prevention and emergency response.

Goal CS-3:	Reduce hazards related to natural flooding and potential inundation from failure of the Bear Gulch Reservoir Dam.
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Goal CS-4:	Support any Town Green Infrastructure programs that address stormwater infrastructure that may use natural processes to manage water and create healthier urban environments.
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Goal CS-5:	Prevent and reduce risks to property and protect residents from urban and wildland fire hazards.
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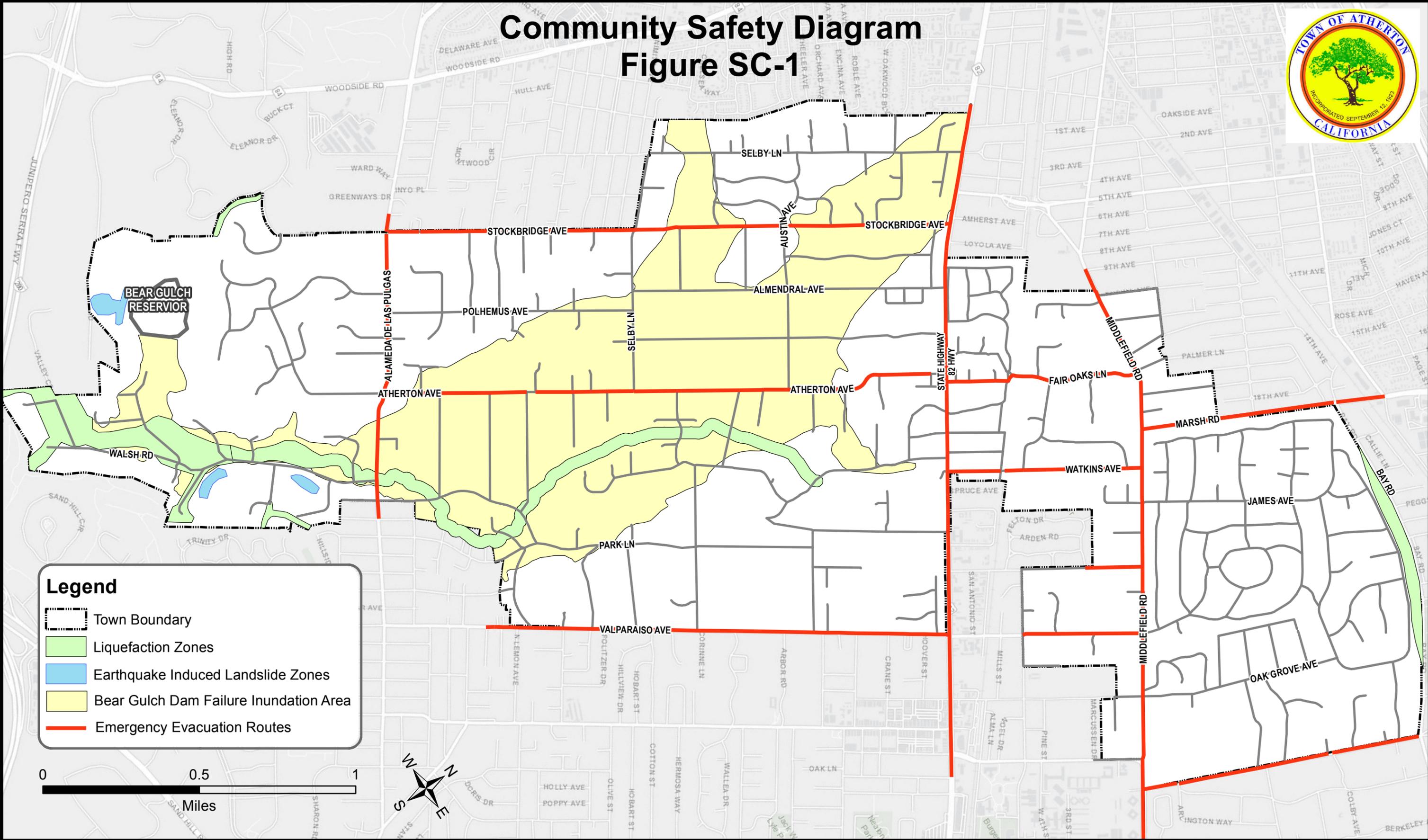
Goal CS-6:	Support the Town's ability to respond effectively to natural and human-caused emergencies.
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Policy CS-6.1: Support the preparation, implementation and regular update of local preparedness and evacuation plans, training and education; and multijurisdictional cooperation and communication for emergency situations.

Policy CS-6.2: Continue to participate in regional emergency planning efforts.

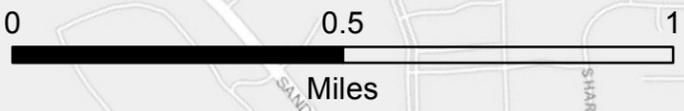
Policy CS-6.3: The emergency evacuation routes established in this General Plan Element are El Camino Real, Middlefield Road, Marsh Road, Alameda de las Pulgas, Atherton Avenue/Fair Oaks Lane, Stockbridge Avenue, Valparaiso Avenue, Glenwood Avenue, Encinal Avenue, Watkins Avenue and Ringwood Avenue.

Community Safety Diagram Figure SC-1



Legend

- Town Boundary
- Liquefaction Zones
- Earthquake Induced Landslide Zones
- Bear Gulch Dam Failure Inundation Area
- Emergency Evacuation Routes



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References

1. General

State of California, Office of Planning and Research, *General Plan Guidelines – 2017*

2. Land Use Element

Browning-Ferris Industries of California, Inc. and SWT Engineering, *Environmental Impact Report Technical Addendum – Clarification of Landfill Capacity*, March 2017

Sacred Heart Schools website, October 2017

WRNS Studio, *Atherton Civic Center, Site Plan – Base Bid, Sht. AS-100, Planning Commission Set*, September 25, 2017

Population Data

Atherton, Town of, *General Plan, Housing Element (2014-2022 Update)*, March 2015

3. Circulation Element

Atherton, Town of, *Bicycle and Pedestrian Master Plan, Final*, Alta Planning + Design / W-Trans, July 2014

Atherton, Town of, *Resolution No. 12-33, Complete Streets adopted November 28, 2012*

Atherton, Town of, *Resolution No. 13-08, Rail Related Policy Positions Adopted by the Town of Atherton, adopted June 14, 2013*

Menlo Park, City of, Community Development Department, *General Plan – Circulation Element*, November 29, 2017

San Mateo, County of, Planning and Building Department, *North Fair Oaks Community Plan, Circulation Element*, November 15, 2011

Santa Clara Valley Transportation Authority, City and County of San Francisco, and San Mateo County Transit District, *Joint Powers Agreement Peninsula Corridor Project*, October 3, 1996

Atherton Local Traffic Flow/Long Range Planning Solutions Study, TJKM Transportation Consultants, May 2018 DRAFT

U. S. Department of Transportation, Federal Highway Administration, *Highway Functional Classification Concepts, Criteria and Procedures*, 2013 Edition

U. S. Department of Transportation, Federal Railroad Administration, Website, *The Train Horn Rule and Quiet Zones*

4. Open Space and Conservation Element

Biological Resources

California Native Plant Society Website, *The California Rare Plant Ranking System*, undated

Christopher A. Joseph & Associates, *Environmental Impact Report for the Sacred Heart Schools Master Plan EIR*, State Clearinghouse #2009112052, April 2010

LSA, *Atherton Library Building Project Draft Environmental Impact Report*, State Clearinghouse #2011112059, March 2012

Climate Change

Regionally Integrated Climate Action Planning Suite, *Climate Action Plan: Town of Atherton*, November 2016, Adopted by City Council October 19, 2016

Cultural Resources

California, State of, The Natural Resources Agency, Office of Historic Preservation, *Letter Re: Holbrook-Palmer Estate, "Elmwood" Listing in the National Register of Historic Places*, October 18, 2016

Christopher A. Joseph & Associates, *Environmental Impact Report for the Sacred Heart Schools Master Plan EIR*, State Clearinghouse #2009112052, April 2010

Consultation with Marion Oster of the Atherton Heritage Association, November 7, 2017

Gullard, Pamela and Nancy Lund, *Under the Oaks: Two Hundred Years in Atherton*, 2009

LSA, *Atherton Library Building Project Draft Environmental Impact Report*, State Clearinghouse #2011112059, March 2012

Ogden Environmental and Energy Services Company, *Draft Environmental Impact Report for Menlo School and College Douglass Hall Project*, November 1992

Drainage

Atherton City Council Staff Report, *Bayfront Canal/Atherton Channel Flood Protection and Restoration project Planning, Design, and Environmental Permitting Memorandum of Understanding (MOU)*, October 4, 2017

NV5, Inc., *Town of Atherton Townwide Drainage Study Update*, April 2015

Poyatos, Martha, San Mateo Local Agency Formation Commission, *Report & Recommended Determinations- Municipal Service Review and Sphere of Influence Review for the Town of Atherton & Atherton Channel Drainage District*, August 14, 2008

San Mateo Local Agency Formation Commission Website, *Atherton Channel Drainage District, Profile*

U. S. Environmental Protection Agency Website, *Green Infrastructure*, August 14, 2017

Forests

Las Pilitas Nursery Website, *California Central Oak Woodland*, June 21, 2013

California Department of Fish and Game California Interagency Wildlife Task Group, *California Wildlife Habitat Relationships System, Coastal Oak Woodland*, April 2005

Groundwater

Atherton City Council Staff Report, *Adoption of Resolution in Support of Sustainable Groundwater Management in the San Francisquito Creek Area*, September 17, 2014

Metzgar, Loren F., John L. Fio, and David K. Uyematsu, *Ground-Water Development and the Effect on Ground-Water Levels and Water Quality in the Town of Atherton, San Mateo County, California*, United States Geological Survey and Hydrologic Consultants, Inc., Water-Resources Report 97-4033, 1997

Mineral Resources

San Mateo, County of, *San Mateo County General Plan, Mineral Resources Map*, November 1986

Open Space for Natural Resources

California Water Service Company Website

Lui, Nelson. California Water Service Company. Personal email communication, October 17, 2017

Open Space for Outdoor Recreation

BFS Landscape Architects and BluePoint Planning, *Holbrook-Palmer Park Master Plan for the Town of Atherton*, May 20, 2015

Menlo Circus Club Website

PlaceWorks, *Civic Center Master Plan Draft EIR for the Town of Atherton*, State Clearinghouse #2014112003, April 2015

5. Community Safety Element

Association of Bay Area Governments Website, Resilience Program, *Interactive Hazards Map*, <http://gis.abag.ca.gov/website/Hazards/>

Atherton, Town of, *Emergency Operations Plan*, January 2010

California, State of, Department of Conservation, *Probabilistic Seismic Hazard Map, Earthquake Shaking Potential for the San Francisco Bay Region Counties*, Summer 2003

California, State of, California Emergency Management Agency, *Tsunami Inundation Map for Emergency Planning, Redwood Point Quadrangle/Palo Alto Quadrangle*, June 15, 2009

California, State of, Department of Forestry and Fire Protection, *Wildland Urban Interface – Fire Threatened Communities*, 2003

California, State of, Department of Water Resources, Division of Safety of Dams

San Mateo, County of, Planning and Building Department, *San Mateo County Hazards/Existing Landslides*, 1997

U. S. Geological Survey, San Francisco Bay Region Geology and Geologic Hazards Website, *About Liquefaction*, <https://geomaps.wr.usgs.gov/sfgeo/liquefaction/aboutliq.html>

6. Initial Study/Mitigated Negative Declaration

San Mateo County Water Pollution Prevention Program, *Construction Best Management Practices (BMP's)*