



DATE: FOR THE PLANNING COMMISSION MEETING OF JUNE 27, 2018

TO: THE PLANNING COMMISSION

**FROM: STEPHANIE DAVIS, AICP, SENIOR PLANNER
NEAL MARTIN, PROJECT PLANNER**

**SUBJECT: ATHERTON GENERAL PLAN UPDATE – COMMUNITY SAFETY
ELEMENT**

RECOMMENDATION:

It is recommended that the Planning Commission receive a report from Staff and discuss the current Community Safety Element with recommended, potential amendments, and provide direction to staff.

BACKGROUND:

In December 2017, the Planning Commission received a report from staff of an overview of process and schedule for the comprehensive update (less the Housing Element) to the existing 2002 Atherton General Plan. The Commission supported the process proposed by Staff which outlined that staff would present the updates to the Planning Commission one to two Elements at a time in a study session format. Following comment and direction received by the Planning Commission at each study session(s) for each of the six Elements to be updated, Staff would then facilitate a public workshop to obtain feedback and comment from the community and incorporate into draft updates prior to the scheduling of the required formal public hearings by the Planning Commission and City Council. The accepted schedule identifies the start of the process to update the General Plan beginning in December 2017 with an anticipated completion date of early 2019 (Attachment 2).

The primary intent of the comprehensive General Plan update is to comply with the minimum guidelines prescribed by the State Office of Planning and Research (OPR) adopted 2017 General Plan Guidelines, as well as to update some existing policies, data references, and maps within the 2002 General Plan to reflect current conditions and Town policies.

ANALYSIS:

A Community Safety Element is intended to reduce the potential short and long-term risks resulting from fire, floods, droughts, earthquakes, landslides, climate change, other hazards including locally relevant safety issues such as airport land use, emergency response, hazardous materials spills, climate risk, and crime reduction. It is most directly related to topics in the Land Use and Open Space and Conservation Elements. California jurisdictions are required to consult with the reviewed by the

State Geological Survey of the Department of Conservation and the Office of Emergency Services prior to adoption of their Safety elements. Staff will consult with noted agencies in advance of any future, formal consideration by the Planning Commission. State guidelines specify that a Community Safety Element addresses the following required issues:

- Identification of unreasonable risks and policies for the protection of the community from such risks.
- Slope instability leading to mudslides and landslides.
- Seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; subsidence, liquefaction, and other seismic hazards, including mapping of known seismic and other geologic hazards.
- Flooding identification and associated goals, policies and objectives to avoid and minimize flooding risk.
- Wildland and Urban Fires identification of, and policies for, the protection of the community from, any unreasonable risks associated with wildland and urban fires.
- Address climate change adaptation and resiliency strategies and associated goals, policies and objections for the protection of the community.
- Mapping of known fire, seismic, geologic and other hazards, as well as evacuation routes.

The Community Safety Element is proposed to be re-structured into three sections.

- I. Purpose and Relation to Other General Plan Elements.
- II. Background Information. Provides information on the existing conditions of seismic hazards, flooding, fires, emergency operations plan, climate change and evacuation routes and peak load water supplies within Atherton.
- III. Goals, Policies and Actions. Provides policy guidance which recognizes potential dangers to public safety that may result from natural and/or man-made causes and seeks to minimize the public risks in such hazards.

Staff has reviewed the existing Community Safety Element and provided substantive updates within the “Background Information” to assure all State required components are addressed. The amendments proposed within the Community Safety Element not only assure compliance with the State guidelines, but to attempt to support the overarching Town goal to maintain its low density, residential character by providing subsequent goals, objectives, policies and actions that identifies and reduces risks to the Town’s residential community, while also requiring future development to adequately account for public safety and health considerations. Several new Town-wide maps will be created to identify such risks and mitigations. These will be presented at a future study session once completed.

Evaluation of other adopted Town documents and/or studies, including the Climate Action Plan, Town-wide Drainage Study, Atherton Emergency Operation Plan, Hazard Mitigation Plan and Atherton Disaster Mitigation Strategies, were assessed and their relevant policies and directives were integrated into the draft. These were all integrated within the “Goals, Policies and Actions” section and are noted to be “existing” or “proposed”.

ENVIRONMENTAL IMPACT:

Per the provisions of the California Environmental Quality Act (CEQA) an environmental analysis will be prepared to analyze any potential environmental impacts that may occur as a result of the project (i.e. updates to the General Plan) and to mitigate any identified impacts to a level of insignificance as feasible. This environmental review would be prepared following all study sessions identified above and would be formally noticed and circulated for public review in accordance with State Law and presented for consideration by the Planning Commission at a future public hearing (estimated to be late 2018).

/s/ Stephanie Davis

Stephanie Davis, AICP

/s/ Neal Martin

Neal Martin, Planning Consultant

Attachments:

1. Proposed Amendments to the Community Safety Element
2. General Plan Update Schedule
3. Existing Community Safety Element

Town of Atherton

Administrative Draft

COMMUNITY SAFETY ELEMENT

of the General Plan

For Planning Commission Review and Discussion

_____ 2018

Table of Contents

| | |
|---|----------|
| I. Purpose and Relation to other Elements | 3 |
| II. Background Information | |
| Seismic Hazards | 3 |
| Alquist-Priolo Earthquake Fault Zones | 3 |
| Surface Rupture | 4 |
| Ground Shaking | 4 |
| Ground Failure | 4 |
| Tsunami | 4 |
| Seiche | 5 |
| Dam Failure | 5 |
| Slope Instability | 5 |
| Land Subsidence | 6 |
| Liquefaction | 6 |
| Flooding | 7 |
| Urban and Wildland Fires | 7 |
| Emergency Operation Plan | 8 |
| Climate Change | 9 |
| Evacuation Routes and Peak Load Water Supply Requirements | 9 |
| III. Goals, Objectives and Policies | 9 |
| Community Safety Element Diagram | 12 |

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. (Existing Section with Proposed Additions in Italics)*

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

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. *(Existing Section)*

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. *(Proposed New Section)*

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. *(Existing Section with Proposed Additions in Italics)*

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 worst earthquake magnitude should likely not exceed the 1906 level of 8.3 on the Richter Scale, according to authorities. 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. *(Existing Section)*

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. *(Proposed New Section)*

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. *(Proposed New Section)*

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. *(Proposed New Section)*

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.

Note: Obtain new Bear Gulch inundation map from Cal Water

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.
- 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. The Police Department is working on an upgrade to this warning system including use of upgraded technology.

An all-volunteer group of concerned Atherton residents formed the Atherton Disaster and Preparedness Team (ADAPT) 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 educate, communicate with and aid fellow Athertonians in preparing for major emergencies and natural disasters. *(Proposed New Section)*

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 surfaces. 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, transnational 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. *(Proposed New Section)*

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 not occurred nor are there any 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. *(Proposed New Section)*

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". *(Proposed New Section)*

Note: Map Liquefaction Susceptibility zones

Flooding *(Proposed New Section)*

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.

Urban and Wildland Fires *(Proposed New Section)*

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.

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”. The entire Town has also been included in the “Wildland-Urban Interface” (WUI); originally a zone of transition between unoccupied land and human development, WUI zones now include heavily vegetated, low-density suburban areas such as Atherton, Woodside, Portola Valley and Los Altos Hills. These lands and communities are at risk of wildfires.

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

Emergency Operations Plan *(Proposed New Section)*

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 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.

Climate Change *(Proposed New Section)*

Atherton’s proposals and policies related to climate change are contained in its adopted¹ **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 Action Plan are addressed in the Circulation

¹ Adopted October 19, 2016

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 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. *(Existing Section)*

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. <i>(Existing Goal)</i> |
|------------|--|

| | |
|------------|--|
| Goal CS-2: | Reduce the risk of injury, structure and property damage from exposure to seismic activity. <i>(Proposed New Goal)</i> |
|------------|--|

Policy CS-2.1: Require preparation of site-specific geologic or geotechnical reports for development and redevelopment proposals in areas subject to earthquake-induced landslides or liquefaction as mandated by the State Seismic Hazard Mapping Act in selected portions of the Bay Area where these maps have been completed, and condition project approval on the incorporation of necessary mitigation measures related to site remediation, structure and foundation design, and/or avoidance. *(From Town of Atherton Disaster Mitigation Strategies)*

Policy CS-2.2: Recognizing that some faults may be a hazard for surface rupture, even though they do not meet the strict criteria imposed by the Alquist-Priolo Earthquake Fault Zoning Act, identify and require geologic reports in areas adjacent to locally significant faults. *(From Town of Atherton Disaster Mitigation Strategies)*

Policy CS-2.3: Recognizing that the California Geological Survey has not completed earthquake-induced landslide and liquefaction mapping for much of the Bay Area, identify and require geologic reports in areas mapped by others as having significant liquefaction or landslide hazards. *(From Town of Atherton Disaster Mitigation Strategies)*

Policy CS-2.4: Support and/or facilitate efforts by the California Geological Survey to complete the earthquake induced landslide and liquefaction mapping for the Bay Area. *(From Town of Atherton Disaster Mitigation Strategies)*

- Policy CS-2.5: Require that local government reviews of geologic and engineering studies are conducted by appropriately trained and credentialed personnel. *(From Town of Atherton Disaster Mitigation Strategies)*
- Policy CS-2.6: Establish and enforce provisions (under subdivision ordinances or other means) that geotechnical and soil-hazard investigations be conducted and filed to prevent grading from creating unstable slopes, and that any necessary corrective actions be taken prior to development approval. *(From Town of Atherton Disaster Mitigation Strategies)*
- Policy CS-2.7: Establish requirements in the Town zoning ordinance to address hillside development constraints, especially in areas of existing landslides. *(From Town of Atherton Disaster Mitigation Strategies)*
- Policy CS-2.8: Public education, research and information dissemination on seismic hazards and emergency response shall be encouraged. *(Existing Policy)*
- Policy CS-2.9: The Town shall seek to improve interjurisdictional cooperation with other agencies for geotechnical safety in land use planning, hazard prevention and emergency response. *(Existing Policy)* **This may be redundant - NM**

| | |
|------------|--|
| Goal CS-3: | Reduce hazards related to natural flooding and potential inundation from failure of the Bear Gulch Reservoir Dam. <i>(Proposed New Goal)</i> |
|------------|--|

- Policy CS-3.1: Establish and enforce requirements for new development so that site-specific designs and source-control techniques are used to manage peak stormwater runoff flows and impacts from increased runoff volumes. *(From Town of Atherton Disaster Mitigation Strategies)*
- Policy CS-3.2: Incorporate FEMA guidelines and suggested activities into local government plans and procedures for managing flood hazards. *(From Town of Atherton Disaster Mitigation Strategies)* **I suggest this policy be excluded since Atherton doesn't participate in Flood Insurance program and FEMA guidelines are unknown – NM**
- Policy CS-3.3: Provide an institutional mechanism to ensure that development proposals adjacent to floodways and in floodplains are referred to flood control districts and wastewater agencies for review and comment (consistent with the NPDES program). *(From Town of Atherton Disaster Mitigation Strategies)* **Is this a policy we want to keep? – NM**

| | |
|------------|---|
| Goal CS-4: | Prevent and reduce risks to property and protect residents from urban and wildland fire hazards. <i>(Proposed New Goal)</i> |
|------------|---|

- Policy CS-4.1: Review new development proposals to ensure that they incorporate required and appropriate fire mitigation measures, including adequate provisions for occupant evacuation and access by emergency response personnel and equipment. *(From Town of Atherton Disaster Mitigation Strategies)*
- Policy CS-4.2: Develop a clear legislative and regulatory framework at both the state and local levels to manage the wildland-urban-interface consistent with *Fire Wise* and sustainable community principles. *(From Town of Atherton Disaster Mitigation Strategies)*
- Policy CS-4.3: Minimum road widths and clearances around structures shall be in accordance with generally recognized minimums consistent with fire protection.

Goal CS-5: Ensure the Town’s ability to respond effectively to natural and human-caused emergencies. *(Proposed New Goal)*

- Policy CS-5.1: Support the preparation, implementation and regular update of local preparedness and evacuation plans, training and education; and multijurisdictional cooperation and communication for emergency situations. *(Proposed New Policy)*
- Policy CS-5.2: Continue to participate in regional emergency planning efforts. *(Proposed New Policy)*
- Policy CS-5.3: 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* and Valparaiso Avenue. *(Existing Policy with Proposed Additions in Italics)*

Insert Fig. CS-1 “Community Safety Diagram” here

General Plan Update - Schedule

Revised 5/17/2018

Oct-17 Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19 Apr-19

| | | | | | | | | | | | | | | | | | | |
|--------------------------------------|--|--|------|--|--|------|--|--|------|------|--|--|--|--|--|--|--|--|
| Open Space & Conservation | | | | | | | | | | | | | | | | | | |
| Prepare Draft | | | | | | | | | | | | | | | | | | |
| PC Study Session | | | 12/6 | | | | | | | | | | | | | | | |
| Revise Draft | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Land Use Element | | | | | | | | | | | | | | | | | | |
| Prepare Draft | | | | | | | | | | | | | | | | | | |
| PC Study Session | | | | | | 4/25 | | | | | | | | | | | | |
| Revise Draft | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Circulation | | | | | | | | | | | | | | | | | | |
| Prepare Draft | | | | | | | | | | | | | | | | | | |
| Transportation Consultant | | | | | | | | | | | | | | | | | | |
| PC Study Session | | | | | | | | | 7/25 | | | | | | | | | |
| Revise Draft | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Community Safety | | | | | | | | | | | | | | | | | | |
| Prepare Draft | | | | | | | | | | | | | | | | | | |
| PC Study Session | | | | | | | | | 6/27 | | | | | | | | | |
| Revise Draft | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Noise | | | | | | | | | | | | | | | | | | |
| Prepare Draft | | | | | | | | | | | | | | | | | | |
| Noise Consultant | | | | | | | | | | | | | | | | | | |
| PC Study Session | | | | | | | | | | 8/22 | | | | | | | | |
| Revise Draft | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Community Workshop | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| IS/MND | | | | | | | | | | | | | | | | | | |
| Prepare Draft | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Planning Commission Hearing | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| City Council Hearing/Adoption | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

- = Prepare Administrative Draft Report
- = Revise Admin. Draft per direction from PC Study Session
- = Consultant Input/Report
- 2/28 = Planning Commission Study Session Date

6.000 COMMUNITY SAFETY ELEMENT

6.100 INTRODUCTION

6.110 Purpose

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.

6.120 Relation to Other Elements

The Safety Element is closely related to the Circulation, Land Use, Open Space and Conservation Elements.

6.130 General Description

The County of San Mateo, through its Area Disaster office, maintains an emergency plan for the county-wide area. The plan describes responsibilities for the coordinated response actions in the event of a disaster. Within that document are found specific plans for earthquake response, hazardous materials incident response, and multi-casualty incident response.

The Town of Atherton will continue to work closely with the Operational Area of the Governor's Office of Emergency Services to ensure up to date information and planning for disasters and other emergencies that might occur. The Town of Atherton will continue to maintain contact with other governmental agencies regarding the protection of residents of Atherton and the County of San Mateo to include nuclear, biological and chemical preparedness. This planning includes response to threats made to public facilities, drinking water treatment facilities, and other necessary infrastructure.

Types of emergencies which could occur in Atherton include a major fire, earthquake, hazardous chemical spill or multi-casualty incident. The likelihood of such an occurrence necessitates that the community prepare appropriate response procedures. Fire safety and hazardous chemical spills are primarily the responsibility of the Menlo Park Fire Protection District. Multi-casualty incidents involve all public safety agencies. Consequently, this element focuses on Seismic Hazards.

6.200 SUMMARY OF SEISMIC HAZARDS IN ATHERTON PLANNING AREA

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.

Seismic hazards associated with earthquakes include the following:

- A. Surface Faulting – which is usually limited to a narrow zone along the fault which is undergoing rupture.
- B. Ground shaking – which poses the most serious potential hazard to Atherton.
- C. Ground Failure – in which the ground no longer holds together as a result of strong earthquake shaking, causing damage to buildings and other structures.
- D. Seismically-Induced Water Waves – which are caused by ground vibrations during an earthquake.

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 worst possible earthquake magnitude should not exceed the 1906 level of 8.3 on the Richter Scale, according to authorities. The principal effect of such an earthquake in most of the Town will be the sudden, unexpected initiation of a strong shaking motion of the ground, which will last approximately one minute. This ground shaking can be expected to be hazardous to people during the earthquake.

Evacuation Routes, Peak Load Water Supply Requirements and Fault Zones

Pursuant to the State Planning Guidelines, evacuation routes have been designated below. Also, State Planning Guidelines require the Safety Element to include a statement specifying the peak load water supply requirements for Town. Peak load water supply requirements currently average just under five million gallons per day during the months of August and September. A map illustrating the proximity of the Town to major earthquake faults has been included in this element.

6.300 SAFETY ELEMENT POLICIES

- 6.310 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.

- 6.320 The emergency evacuation routes established in this General Plan Element are El Camino Real, Middlefield Road, Marsh Road, Alameda de las Pulgas and Valparaiso Avenue.
- 6.330 Minimum road widths and clearances around structures shall be in accordance with generally-recognized minimums consistent with fire protection.
- 6.340 Emergency service personnel shall maintain high levels of effort in areas of emergency preparedness training, action plan development and drills, education and new techniques for community response and prevention, and inter-agency cooperation for public safety.
- 6.350 The Town shall incorporate geotechnical hazard data such as the fault map contained in this document into future land use decision making, site design and construction standards.
- 6.360 Public education, research and information dissemination on seismic hazards and emergency response shall be encouraged.
- 6.370 The Town shall seek to improve interjurisdictional cooperation with other agencies for geotechnical safety in land use planning, hazard prevention and emergency response.